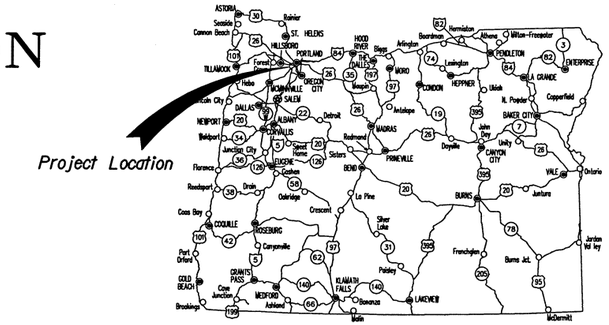
INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
1	Title Sheet
1A	Index of Sheets

Labor "Keeping Oregon on the Move"

PUTTING OREGON BACK TO WORK

STATE OF OREGON
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED PROJECT
PAVING & SIGNALS



HALL BLVD. OVERLAY
ALLEN BLVD. TO HART ROAD

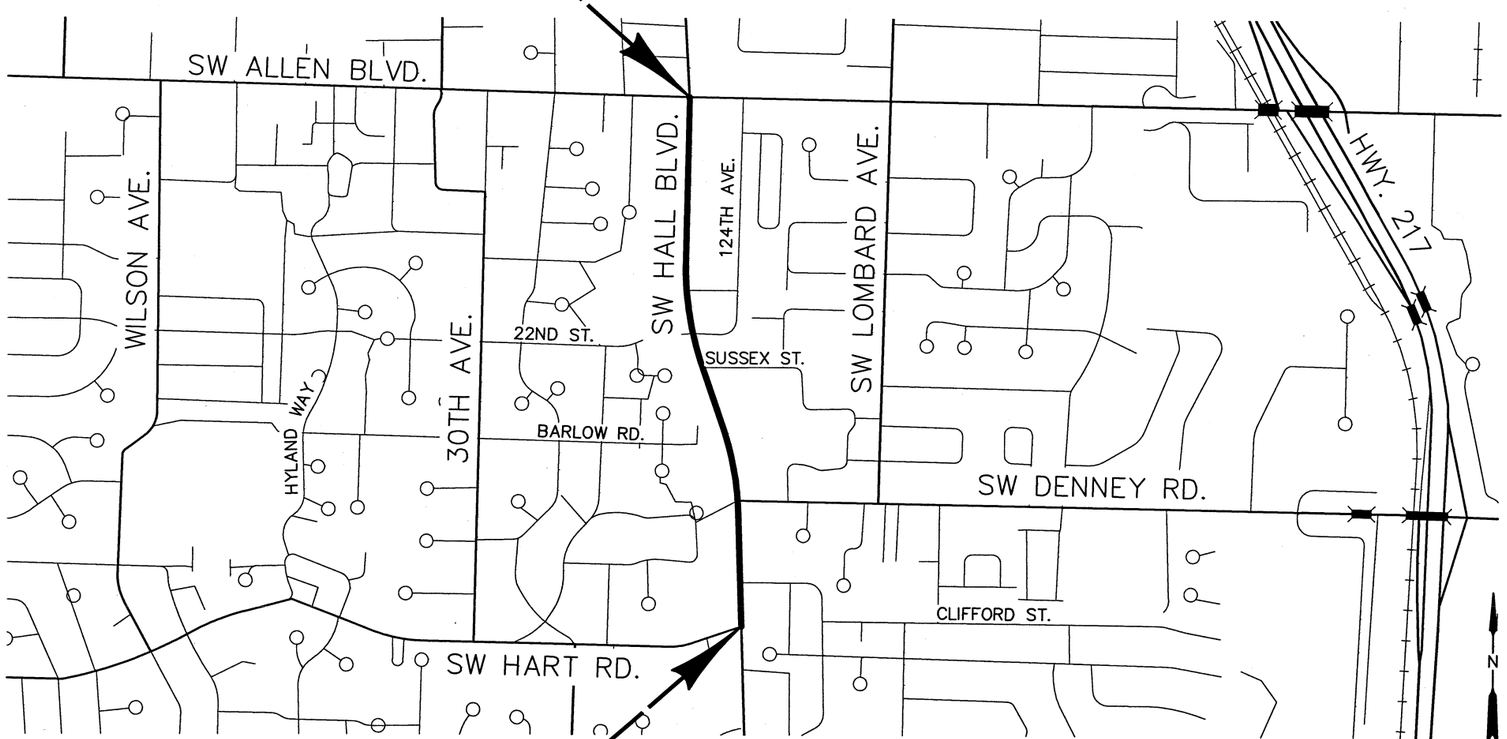
WASHINGTON COUNTY
JULY 2009

Overall Length Of Project - 0.67 Miles

ATTENTION:
Oregon Law Requires You To Follow Rules Adopted By The Oregon Utility Notification Center. Those Rules Are Set Forth In OAR 952-001-0010 Through OAR 952-001-0090. You May Obtain Copies Of The Rules By Calling The Center. (Note: The Telephone Number For The Oregon Utility Center Is (503) 232-1987.)

LET'S ALL WORK TOGETHER TO MAKE THIS JOB SAFE

BEGINNING OF PROJECT
STA. 9+22



END OF PROJECT
STA. 44+80

T. 1 S., R. 1 W., W.M.

City Of Beaverton

OREGON TRANSPORTATION COMMISSION

Gail Achterman	CHAIR
Mike Nelson	VICE CHAIR
Janice J. Wilson	COMMISSIONER
Alan Brown	COMMISSIONER
David Lohman	COMMISSIONER
Matthew L. Garrett	DIRECTOR OF TRANSPORTATION

PLANS PREPARED FOR
CITY OF BEAVERTON
BY:
DAVID EVANS AND ASSOCIATES, INC.
2100 Southwest River Parkway
Portland Oregon 97201 Ph: 503.223.6663

These plans were developed using AASHTO design standards. Exceptions to these standards, if any, have been submitted and approved by the ODOT Chief Engineer or their delegated authority.

By:_____
Signature

_____
Print name and title

_____
Concurrence by ODOT Chief Engineer

HALL BLVD. OVERLAY
ALLEN BLVD. TO HART ROAD
WASHINGTON COUNTY

FEDERAL HIGHWAY ADMINISTRATION	PROJECT NUMBER	SHEET NO.
OREGON DIVISION	#	1

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INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
	ROADWAY
2 thru 2A	*Typical Sections*
2B thru 2B-6	*Details*
3 thru 8	*General Construction*
	TRAFFIC
SG	*Signal Legend*
SG-2	*Signal Plan*
SG-3	*Detection Plan*
ST thru ST-7	*Striping Plans*

HALL BLVD. OVERLAY
ALLEN BLVD. TO HART ROAD
WASHINGTON COUNTY

FEDERAL HIGHWAY ADMINISTRATION	PROJECT NUMBER	SHEET NO.
OREGON DIVISION	#	1A

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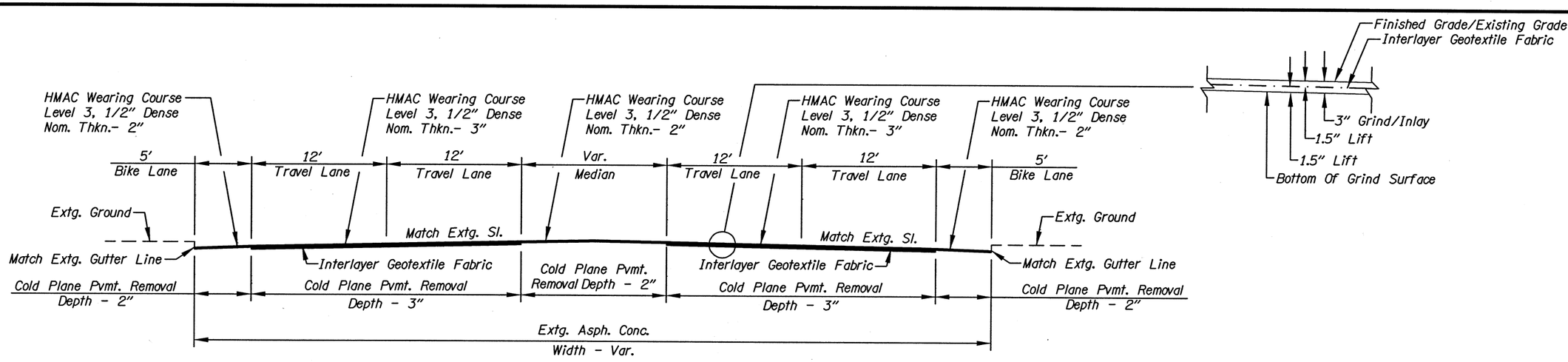
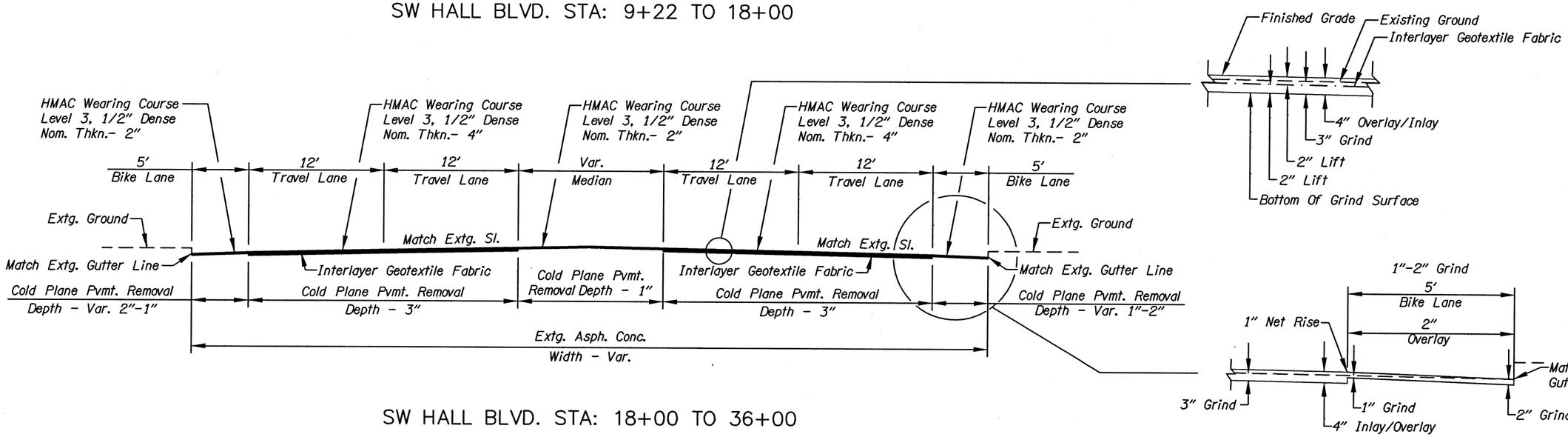


SW HALL BLVD. STA: 9+22 TO 18+00



SW HALL BLVD. STA: 18+00 TO 36+00

OREGON DEPARTMENT OF TRANSPORTATION

DAVID EVANS AND ASSOCIATES, INC.
2100 Southwest River Parkway
Portland Oregon 97201 Ph: 503.223.6663

REGISTERED PROFESSIONAL ENGINEER
13,626
OREGON
JULY 16, 1987
WALTER G. BARTEL
EXPIRES 12-31-09

HALL BLVD. OVERLAY
ALLEN BLVD. TO HART ROAD

WASHINGTON COUNTY

Reviewed By – RGA
Designed By – Scott Emmens
Drafted By – Justin DeMello

TYPICAL SECTIONS

SHEET NO. 2

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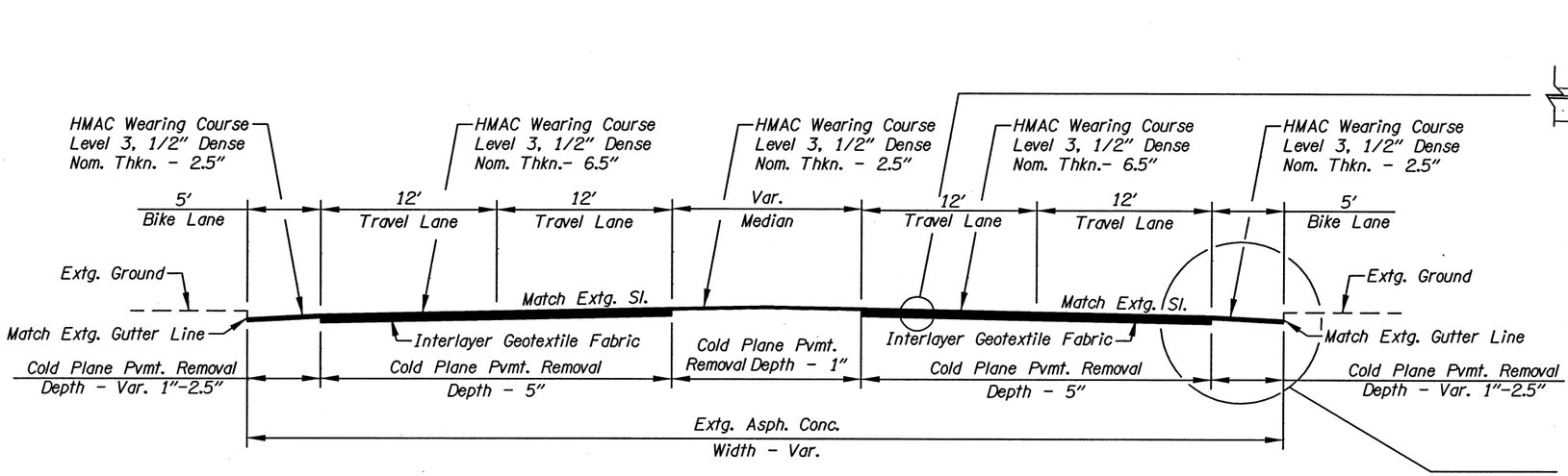

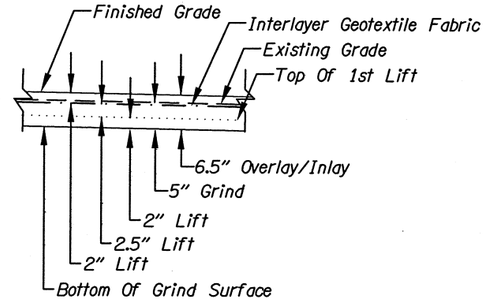

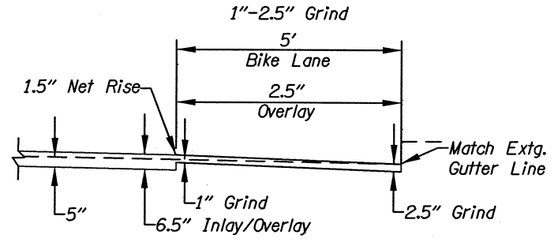

SW HALL BLVD. STA: 36+00 TO 44+80

REGISTERED PROFESSIONAL ENGINEER
13,626
OREGON
JULY 16, 1987
WALTER G. BARTEL
EXPIRES 12-31-09

OREGON DEPARTMENT OF TRANSPORTATION

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HALL BLVD. OVERLAY
ALLEN BLVD. TO HART ROAD

WASHINGTON COUNTY

Reviewed By - RGA
Designed By - Scott Emmens
Drafted By - Justin DeMello

TYPICAL SECTIONS

SHEET NO. 2A

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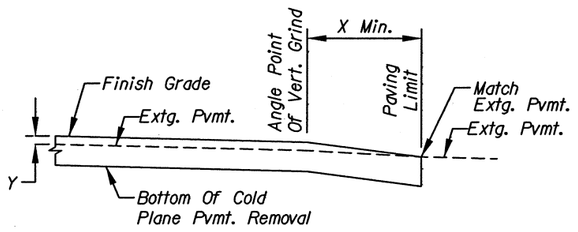
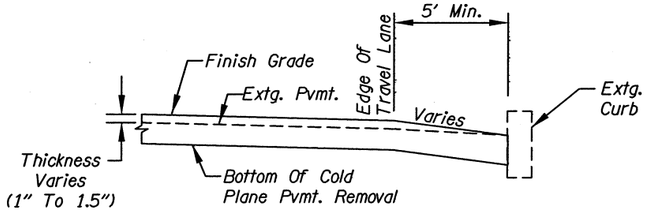
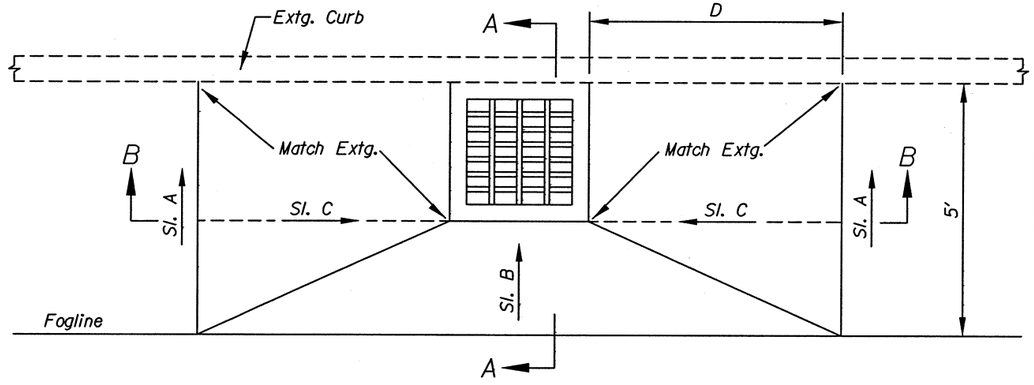
TAPER INTO EXTG. ROADS			
INTERSECTION OF	X	Y	SLOPE
Sta. 17+70 To Sta. 18+00	30'	1"	0.27%
Hall Blvd. and Sabin St.	15'	1"	0.56%
Hall Blvd. and Metz St.	15'	1"	0.56%
Hall Blvd. and Sussex St.	15'	1"	0.56%
Hall Blvd. and Denney Rd.	15'	1.5"	0.83%
Hall Blvd and Cresmoor Dr.	15'	1.5"	0.83%
Hall Blvd. at Hart Rd.	30'	1.5"	0.42%
Sta. 44+50 To Sta. 44+80	30'	1.5"	0.42%



PAVEMENT MATCHING DETAIL



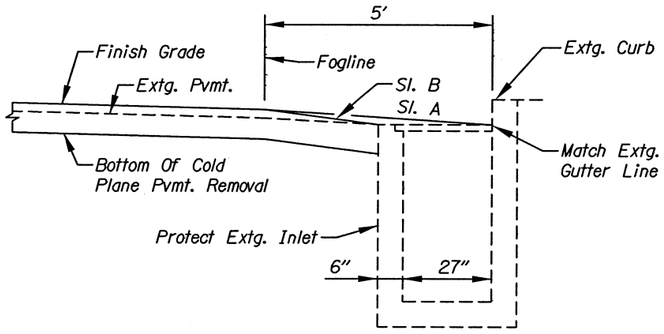
FLOWLINE MATCHING DETAIL



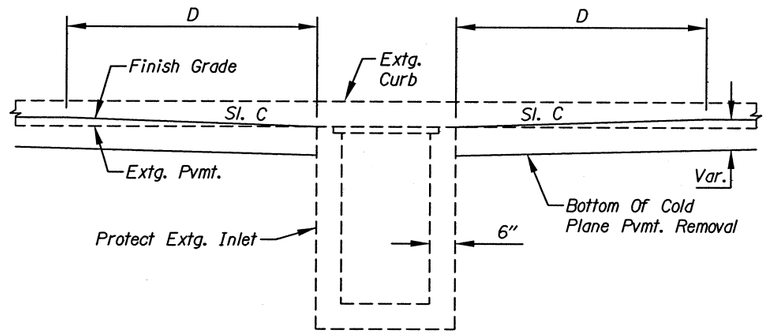
PLAN

INLET PAVING DIMENSIONS				
LOCATION	D	A	B	C
Sta. 18+00 To Sta. 36+00	5'	4.2%	12.89%	1.85%
Sta. 36+00 To Sta. 44+80	8'	5.0%	8.1%	1.72%

Assumptions: Existing Cross Slope = 2.50%
: Curb Is Level
: Bike Lane = 5.0'

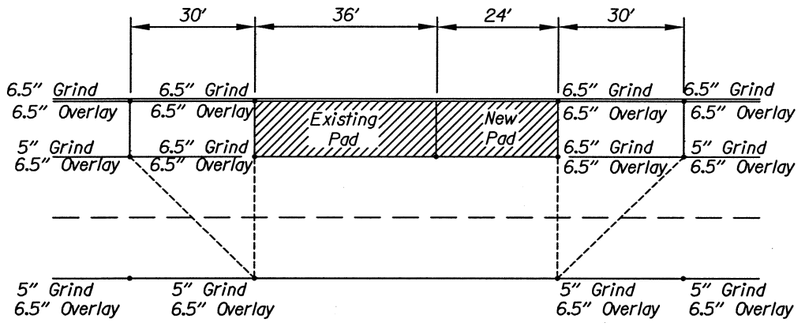


SECTION A–A



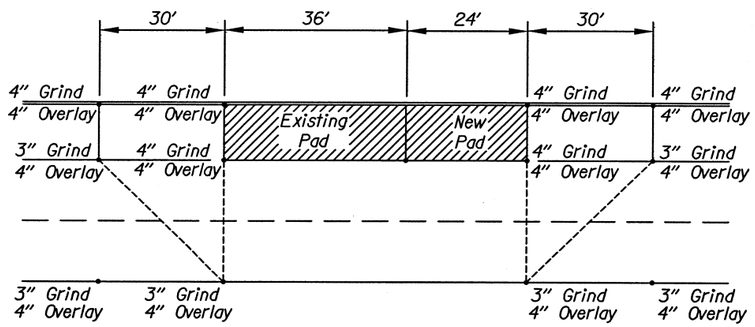
SECTION B–B

INLET PAVING DETAIL



Sta. 36+00 To Sta. 44+00

PAVING PATTERN ADJACENT TO BUS PADS



Sta. 18+00 To Sta. 36+00

PAVING PATTERN ADJACENT TO BUS PADS

REGISTERED PROFESSIONAL ENGINEER
13,626
OREGON
JULY 16, 1987
WALTER G. BARTEL
EXPIRES 12-31-09

OREGON DEPARTMENT OF TRANSPORTATION

DAVID EVANS AND ASSOCIATES, INC.
2100 Southwest River Parkway
Portland Oregon 97201 Ph: 503.223.6663

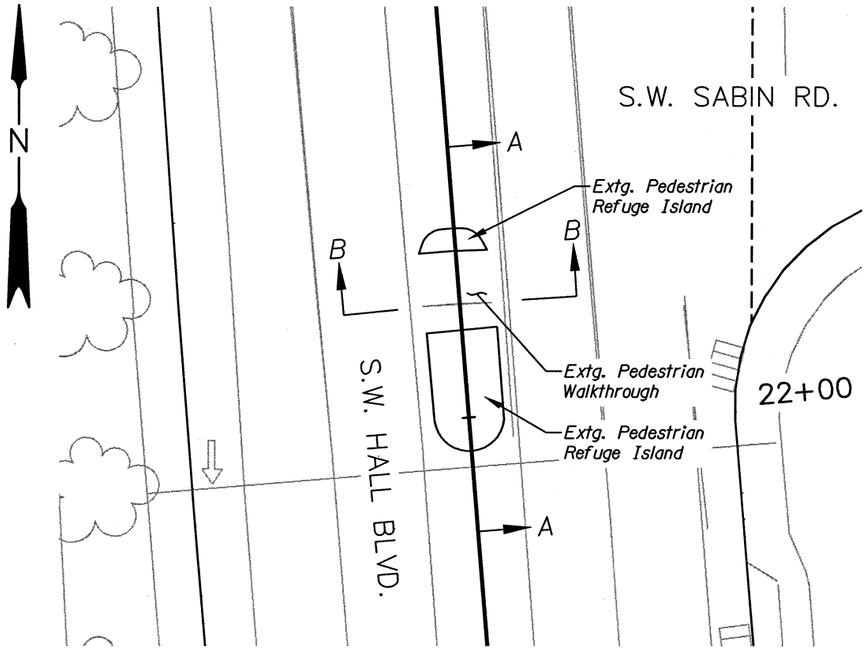
HALL BLVD. OVERLAY
ALLEN BLVD. TO HART ROAD

WASHINGTON COUNTY

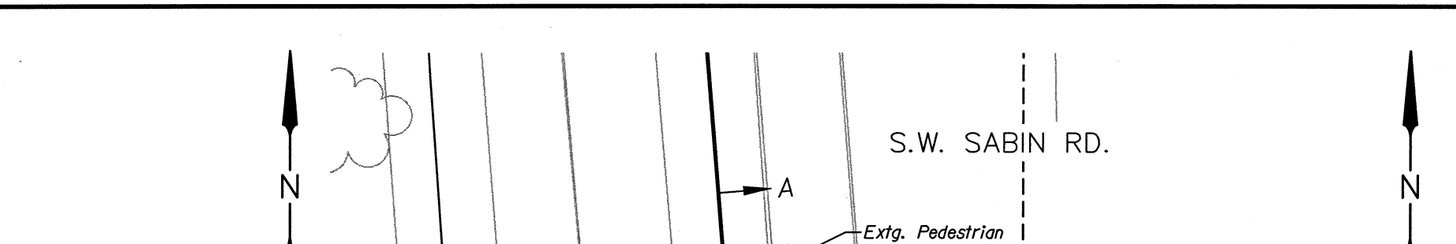
Reviewed By – RGA
Designed By – Scott Emmens
Drafted By – Justin DeMello

DETAILS

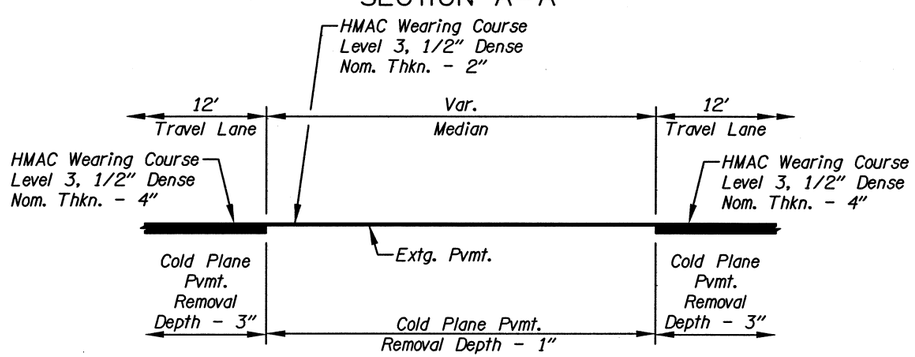
SHEET NO. 2B



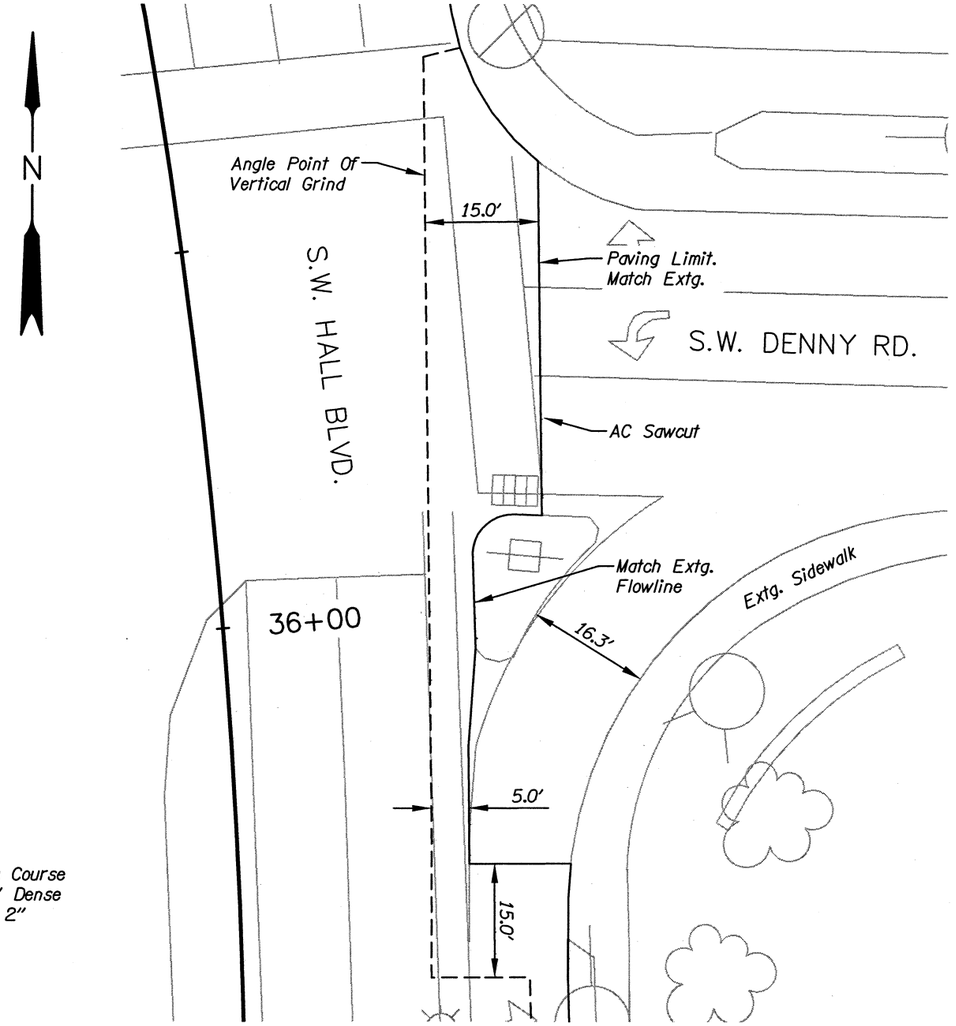
ISLAND AT HALL BLVD. AND SABIN RD.
1"=20'



SECTION A–A



SECTION B–B



ISLAND AT HALL BLVD. AND DENNY RD.
1"=20'

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HALL BLVD. OVERLAY
ALLEN BLVD. TO HART ROAD

WASHINGTON COUNTY

Reviewed By – RGA
Designed By – Scott Emmens
Drafted By – Justin DeMello

DETAILS

SHEET NO. 2B–2

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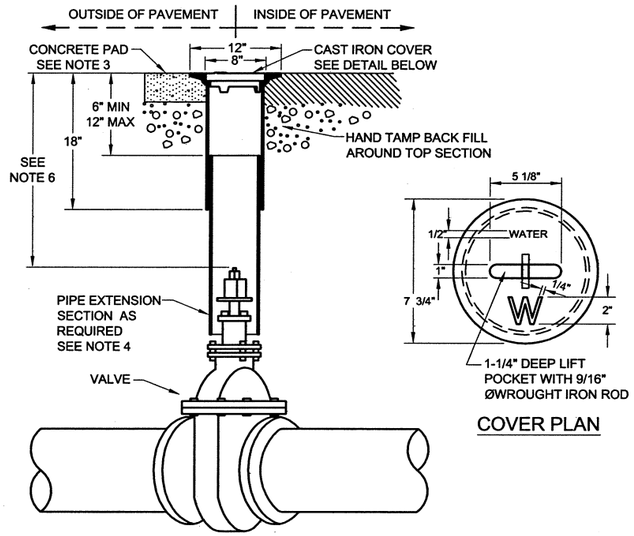


COVER PLAN

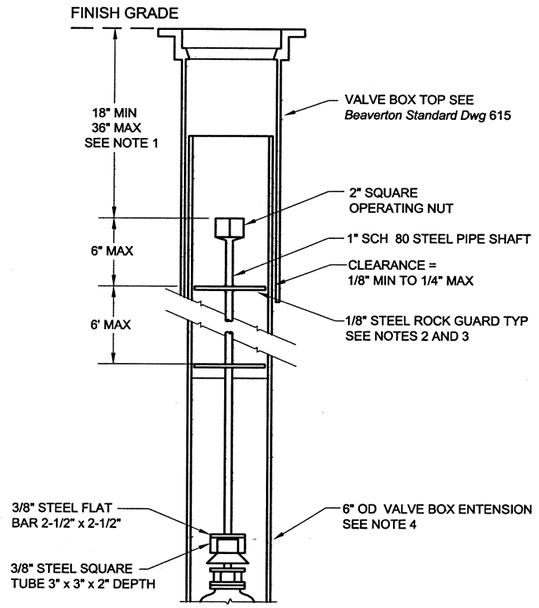
NOTES:

1. Valve type, size and ends as specified or shown on plans.
2. All valves that are 2 inch and larger shall have an operating nut.
3. When used in non-paved areas, provide an 18 inch square or 24 inch diameter round by 4 inch thick portland cement concrete pad.
4. For pipe extension section: use a 6 inch OD 12 gauge steel or 6 inch *ASTM* D3034 SDR 35 PVC pipe in one-piece construction with no longitudinal cuts.
5. The cast iron cover is to have WATER or W cast with raised lettering into top surface.
6. When the valve nut is 60 inches or deeper below finished grade, provide valve operator extension per *Beaverton Standard Dwg* 620.
7. For 18 inches of valve box, flanged upper section of valve box and cover, use *Olympic Foundry* VB 910.

City Of Beaverton

PUBLIC WORKS DEPARTMENT		WATER VALVE BOX AND COVER	
UTILITIES ENGINEER David A. Winship, P.E.	DATE 2 - 13 - 07	DRAWN BY JR - ED	DRAWING NO. 615

WATER VALVE BOX AND COVER
C.O.B. STD. DRG. NO. 615



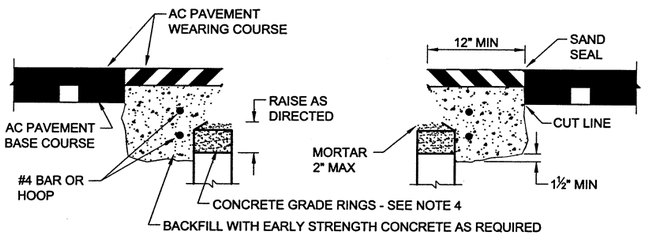
NOTES:

1. Extend the 2 inch square operating nut when the valve nut is 60 inches or deeper below the finished grade.
2. The rock guard shall be a 1/8 inch steel plate welded to the pipe shaft with a diameter that is 3/8 inch less than the inside diameter of the valve box.
3. Where depth is over 6 feet, a second plate shall be installed equidistant between the first rock guard and the valve nut. Second plate shall be constructed same as rock guard.
4. Extend valve box by using one piece with no longitudinal cuts, to the length required, of 6 inch OD, 12 gauge steel pipe or *ASTM* D3034-SDR 35 PVC pipe. See *Beaverton Standard Dwg* 615.

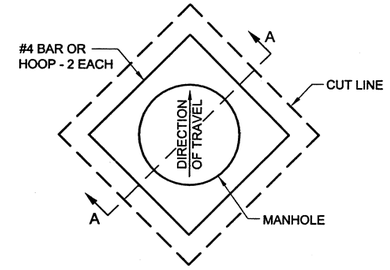
City Of Beaverton

PUBLIC WORKS DEPARTMENT		WATER VALVE OPERATOR EXTENSION	
UTILITIES ENGINEER David A. Winship, P.E.	DATE 2 - 13 - 07	DRAWN BY JR - ED	DRAWING NO. 620

WATER VALVE OPERATOR EXTENSION
C.O.B. STD. DRG. NO. 620



SECTION A-A



PLAN

NOTES:

1. This manhole adjustment method is to be used for adjusting a new or existing manhole after paving over it with the HMAC base and wearing courses.
2. Cover manhole with building paper and construct HMAC base and wearing courses.
3. Sawcut square or circular excavation around manhole 12 inches minimum from manhole frame. Orient diagonal of square so that it is parallel to roadway centerline.
4. Raise manhole frame and cover to finish grade by installing concrete grade rings and leveling mortar. No more than 8 inches of concrete grade rings shall be used to adjust any manhole to grade. Metal paving rings/risers are not allowed, except as necessary during a pavement overlay project, and then only one (1) paving ring is allowed. Engineer must design and include calculations in the construction plan set, showing which manhole adjustment option will be used at each location.
5. Backfill with early strength PCC and HMAC wearing course.

City Of Beaverton

PUBLIC WORKS DEPARTMENT		MANHOLE ADJUSTMENT SEQUENCE OPTION #1	
CITY ENGINEER Terry Waldele, P.E.	DATE 3 - 22 - 05	DRAWN BY JCH - CPD	DRAWING NO. 320

MAJOR ADJUST MANHOLE
C.O.B. STD. DRG. NO. 320

OREGON DEPARTMENT OF TRANSPORTATION

DAVID EVANS AND ASSOCIATES, INC.
2100 Southwest River Parkway
Portland Oregon 97201 Ph: 503.223.6663

REGISTERED PROFESSIONAL ENGINEER
13,626
OREGON
JULY 16, 1987
WALTER G. BARTEL

EXPIRES 12-31-09

HALL BLVD. OVERLAY
ALLEN BLVD. TO HART ROAD

WASHINGTON COUNTY

Reviewed By – RGA
Designed By – Scott Emmens
Drafted By – Justin DeMello

DETAILS

SHEET NO. 2B–3

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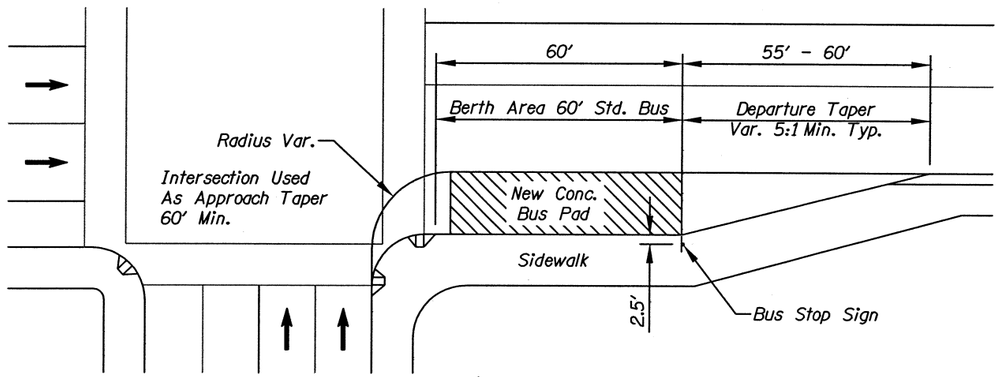
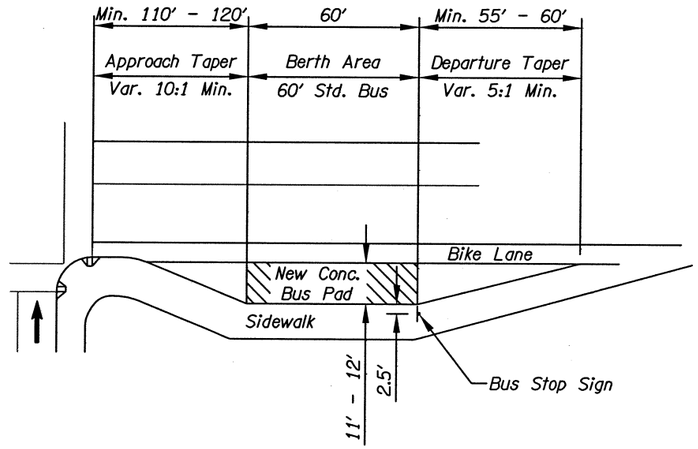
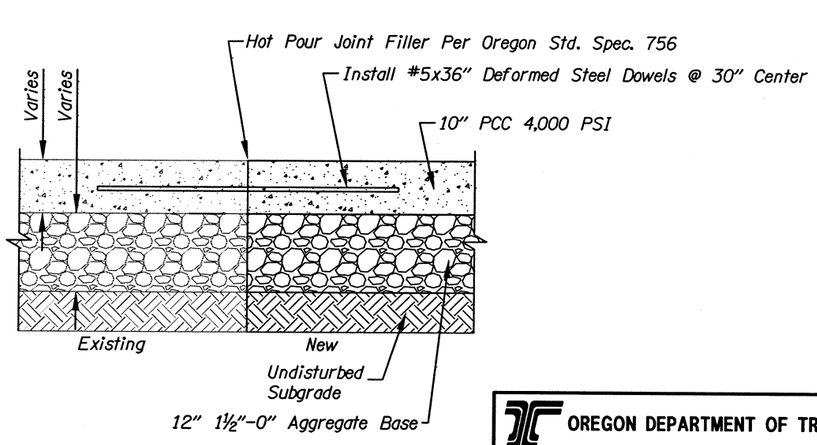


BUS PULLOUT AND BUS PAD



MID-BLOCK BUS PULLOUT
AND BUS PAD

CONCRETE BUS PAD



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HALL BLVD. OVERLAY
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WASHINGTON COUNTY

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Designed By – Scott Emmens
Drafted By – Justin DeMello

DETAILS

SHEET NO. 2B-4

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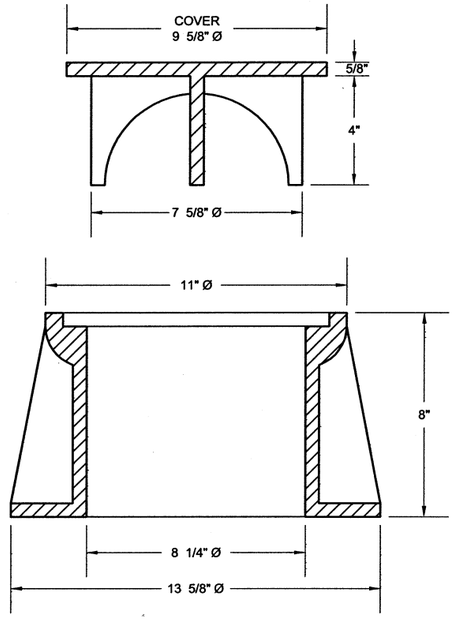


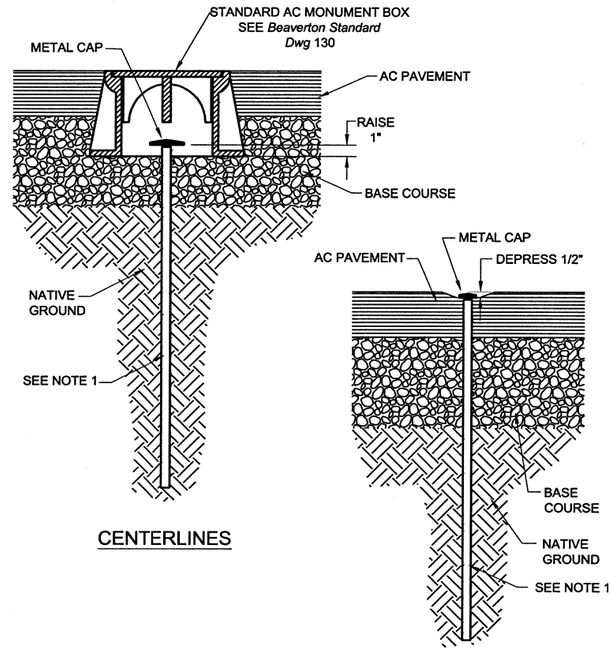
BOX SECTION

NOTES:

1. Standard monument box for AC pavement shall be cast iron with 8-inch minimum inside diameter, *Olympic Foundry # M1014* or equal.
2. Matching monument box cover shall be cast iron with MON or MONUMENT cast into the top face, *Olympic Foundry # 14 - 6169* or equal.
3. New manholes are to be located a minimum of 4 feet from center of its base to monument box.

City Of Beaverton

PUBLIC WORKS DEPARTMENT		STANDARD AC MONUMENT BOX	
CITY ENGINEER	DATE	DRAWN BY	DRAWING NO.
Terry Waldele, P.E.	5 - 09 - 06	JR - CPD	130



NOTES:

1. All monuments shall use either ⅝ inch Ø x 30 inches long iron rod or ¾ inch Ø x 30 inches long iron pipe.
2. All monuments shall be in accordance with the *Oregon Revised Statutes* Chapters 92 and 209.
3. For post-construction monumentation on existing asphalt surfaces, see *Beaverton Standard Dwg* 133.

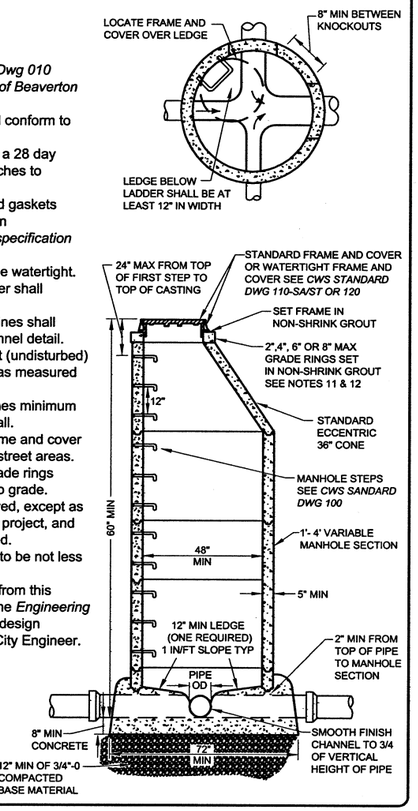
City Of Beaverton

PUBLIC WORKS DEPARTMENT		ASPHALT CENTERLINE MONUMENTS	
CITY ENGINEER	DATE	DRAWN BY	DRAWING NO.
Terry Waldele, P.E.	4 - 27 - 06	JR - CPD	135

NOTES:

1. This drawing replaces *CWS Standard Dwg 010* and has been modified for use by *City of Beaverton Ordinance #4303.*
2. All precast manhole riser sections shall conform to the requirements of *ASTM C 478.*
3. All poured in place concrete shall have a 28 day strength of 3000 psi, and slump of 2 inches to 4 inches.
4. All joints shall be sealed with preformed gaskets such as *Kent-Seal #2, Ram-Neck*, or an approved equal conforming to *federal specification* SS-S00210.
5. All pipe connections to manhole shall be watertight.
6. *Pipe connections of 24 inches or greater shall require a manhole and channel detail.
7. Pipe connections of four or more mainlines shall require a manhole connection and channel detail.
8. Provide a minimum of 8 inches of intact (undisturbed) manhole wall between pipe breakouts as measured on the inside face of the manhole.
9. Breakout of wall for pipe shall be 2 inches minimum and 4 inches maximum clear of pipe wall.
10. Watertight / tamper proof manhole frame and cover shall be used in all easement and off street areas.
11. *No more than 8 inches of concrete grade rings shall be used to adjust any manhole to grade.
12. *Metal paving rings/risers are not allowed, except as necessary during a pavement overlay project, and then only one (1) paving ring is allowed.
13. *Minimum fall between inlet and outlet to be not less than 0.10 feet.
14. *The City reserves the right to deviate from this drawing and related requirements in the *Engineering Design Manual* as dictated by project design parameters, and as approved by the City Engineer.

* INDICATES MODIFICATIONS OF *CWS STANDARD DWG 010*



City Of Beaverton

PUBLIC WORKS DEPARTMENT		CWS (USA) STANDARD MANHOLE WITH C.O.B. MODIFICATIONS	
CITY ENGINEER	DATE	DRAWN BY	DRAWING NO.
Terry Waldele, P.E.	5 - 09 - 06	JR - CPD	330

STANDARD AC MONUMENT BOX
C.O.B. STD. DRG. NO. 130

ASPHALT CENTERLINE MONUMENTS
C.O.B. STD. DRG. NO. 135

CWS (USA) STANDARD MANHOLE
WITH C.O.B. MODIFICATIONS
C.O.B. STD. DRG. NO. 330

OREGON DEPARTMENT OF TRANSPORTATION

REGISTERED PROFESSIONAL ENGINEER
13,626
OREGON
JULY 16, 1987
WALTER G. BARTEL
EXPIRES 12-31-09

DAVID EVANS AND ASSOCIATES, INC.
2100 Southwest River Parkway
Portland Oregon 97201 Ph: 503.223.6663

HALL BLVD. OVERLAY
ALLEN BLVD. TO HART ROAD

WASHINGTON COUNTY

Reviewed By – RGA
Designed By – Scott Emmens
Drafted By – Justin DeMello

DETAILS

SHEET NO. 2B–5

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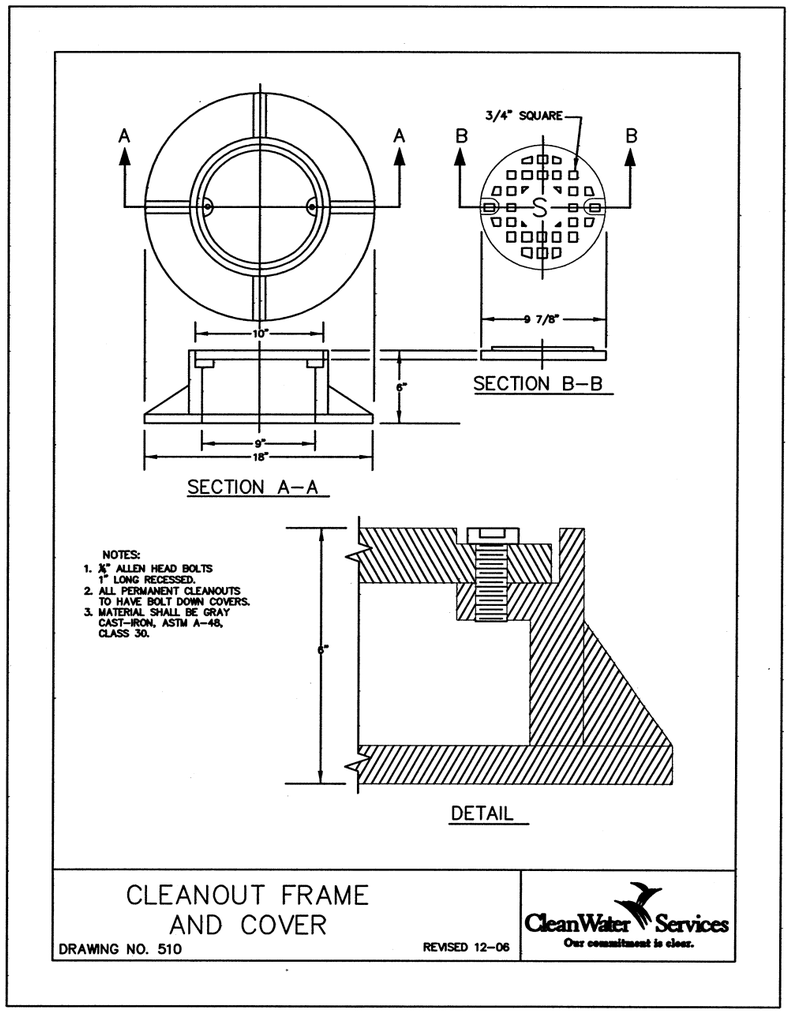


CLEANOUT FRAME AND COVER
C.W.S. DRG. NO. 510

REGISTERED PROFESSIONAL ENGINEER
13,626
OREGON
JULY 16, 1987
WALTER G. BARTEL
EXPIRES 12-31-09

OREGON DEPARTMENT OF TRANSPORTATION

DAVID EVANS AND ASSOCIATES, INC.
2100 Southwest River Parkway
Portland Oregon 97201 Ph: 503.223.6663

HALL BLVD. OVERLAY
ALLEN BLVD. TO HART ROAD

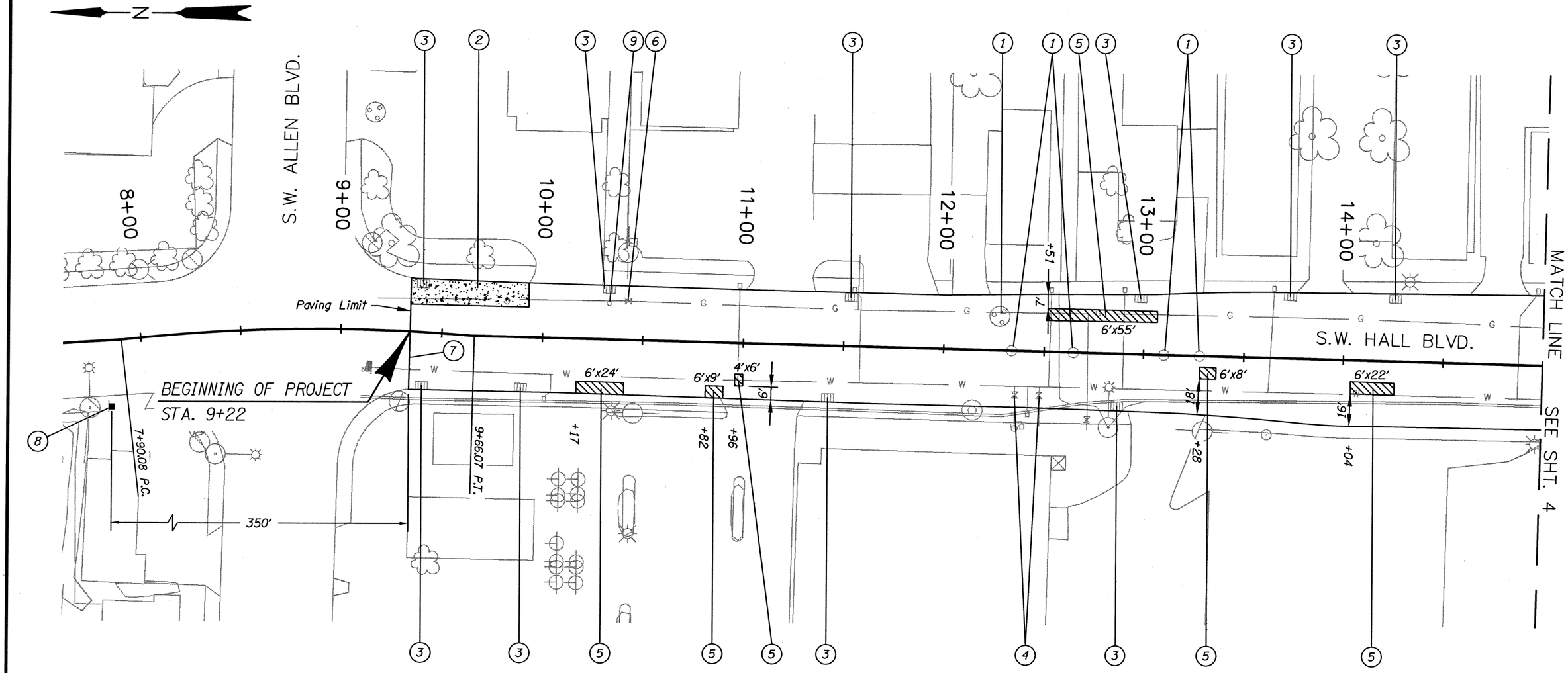
WASHINGTON COUNTY

Reviewed By – RGA
Designed By – Scott Emmens
Drafted By – Justin DeMello

DETAILS

SHEET NO. 2B–6

P:\B\BVNX00000056\0400CAD\RH\Sheets\BVNX0056–2B–6.dwg jnd Jun 29, 2009 1:13pm



(1) Protect Extg. MH - 5

(2) Replace Extg. TriMet Bus Pad (60'x12') (See Sht. 2B-4 For Details)

(3) Protect Extg. Inlet - 10 (For Inlet Paving Detail, See Sht. 2B)

(4) Protect Extg. Water Valve Box And Cover - 2 (For Details, See Sht. 2B-3)

(5) 9" Grind And 9" Level 3 ½" HMAC Inlay

(6) Protect Extg. Gas Valve Box And Cover

(7) Sawcut Line Match Extg. (See Sht. 2B For Pvmt. Matching Details)

(8) Install Temporary "Putting Oregon Back to Work" Sign For Duration Of Construction. See Sign #CG20-8su In The ODOT Sign Policy And Guidelines Manual For Details

(9) Protect Extg. Cleanout

Scale 1"=50'

REGISTERED PROFESSIONAL ENGINEER
13,626
OREGON
JULY 16, 1987
WALTER G. BARTEL
EXPIRES 12-31-09

OREGON DEPARTMENT OF TRANSPORTATION

DAVID EVANS AND ASSOCIATES, INC.
2100 Southwest River Parkway
Portland Oregon 97201 Ph: 503.223.6663

HALL BLVD. OVERLAY
ALLEN BLVD. TO HART ROAD

WASHINGTON COUNTY

Reviewed By - RGA
Designed By - Scott Emmens
Drafted By - Justin DeMello

GENERAL CONSTRUCTION

SHEET NO. 3

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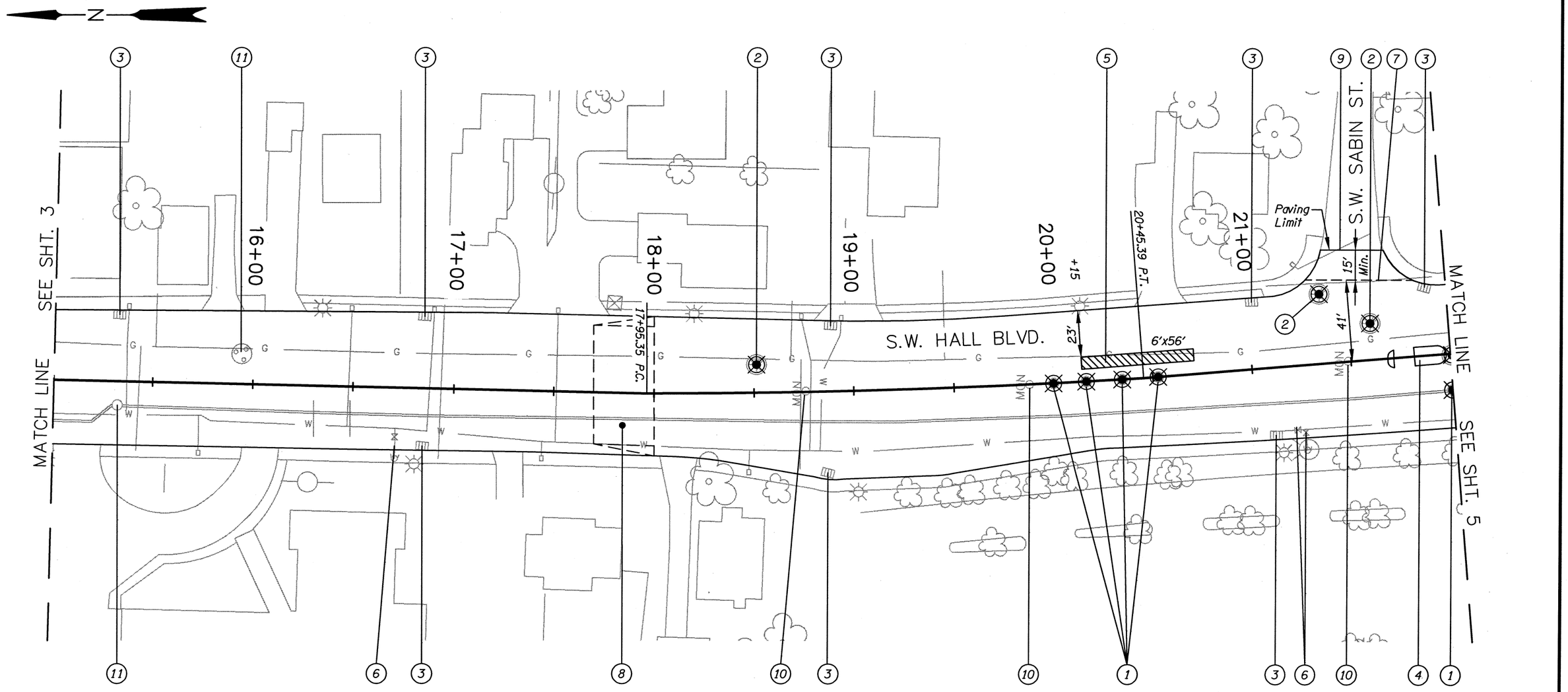

Scale 1"=50'

(1) *Minor Adjust MH - 5*

(2) *Major Adjust MH - 3*
(For Details, See Sht. 2B-3)

(3) *Protect Extg. Inlet - 8*
(For Inlet Paving Detail, See Sht. 2B)

(4) *Protect Extg. Pedestrian Refuge Island*
(For Details, See Sht. 2B-2)

(5) *8" Grind And 9" Level 3 ½" HMAC Overlay*

(6) *Protect Extg. Water Valve Box And Cover And Adjust To Finished Grade - 3*
(For Details, See Sht. 2B-3)

(7) *Angle Point Of Vertical Grind*
(See Sht. 2B For Pvmt. Matching Details)

(8) *Vertical Overlay Transition. Sta: 17+70 To 18+00*
(See Shts. 2 And 2B-2 For Details)

(9) *Sawcut Line Match Extg.*
(See Sht. 2B For Pvmt. Matching Details)

(10) *Protect Extg. Centerline Monument And Adjust To Finished Grade - 3*

(11) *Protect Extg. MH*

REGISTERED PROFESSIONAL ENGINEER
13,626
OREGON
JULY 16, 1987
WALTER G. BARTEL
EXPIRES 12-31-08

OREGON DEPARTMENT OF TRANSPORTATION

DAVID EVANS AND ASSOCIATES, INC.
2100 Southwest River Parkway
Portland Oregon 97201 Ph: 503.223.6663

HALL BLVD. OVERLAY
ALLEN BLVD. TO HART ROAD

WASHINGTON COUNTY

Reviewed By - RGA
Designed By - Scott Emmens
Drafted By - Justin DeMello

GENERAL CONSTRUCTION

SHEET NO. 4

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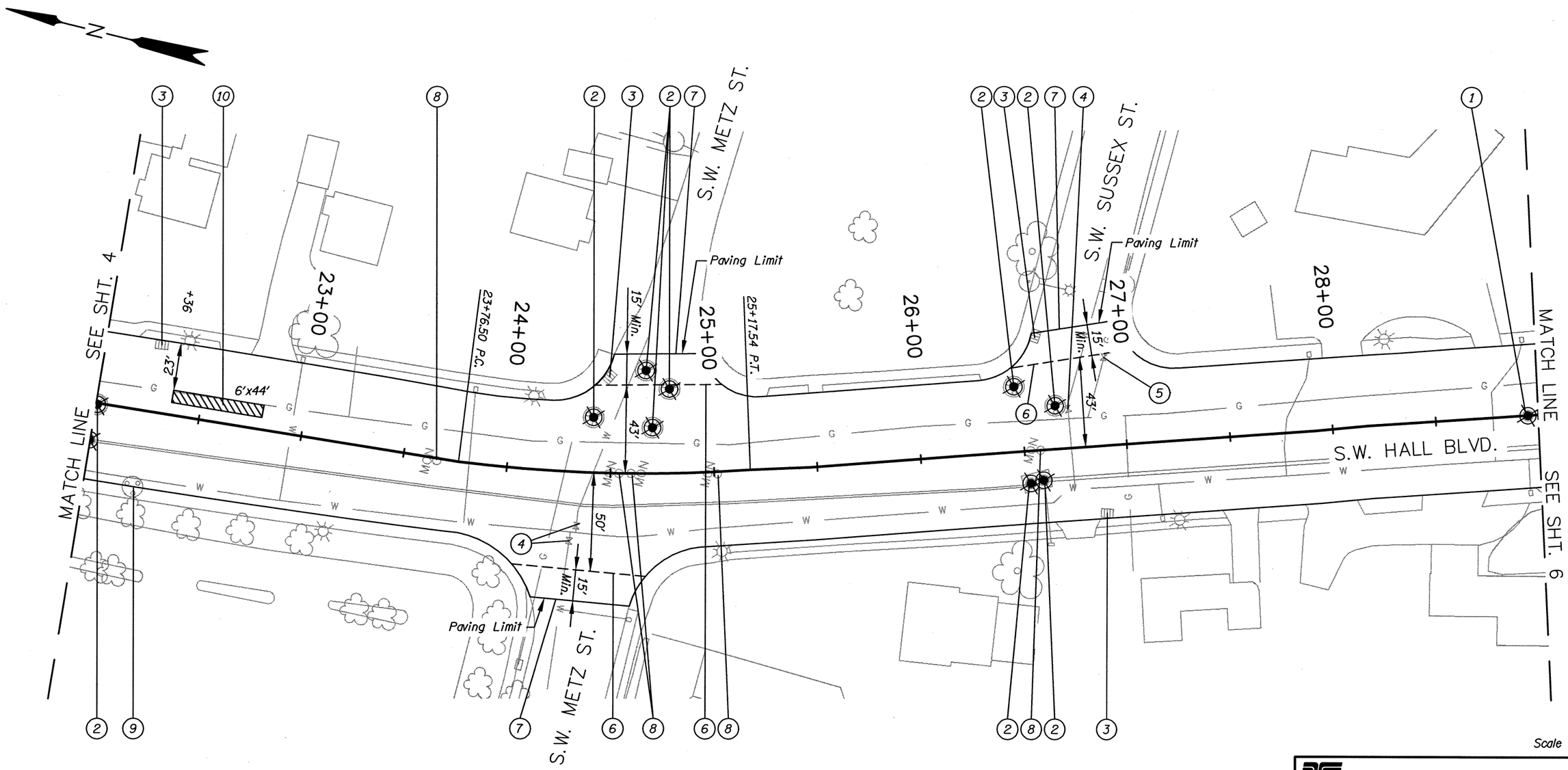

Scale 1"=50'

(1) *Minor Adjust MH*

(2) *Major Adjust MH – 9*
(For Details, See Sht. 2B-3)

(3) *Protect Extg. Inlet – 4*
(For Inlet Paving Detail, See Sht. 2B)

(4) *Protect Extg. Water Valve Box And Cover And Adjust To Finished Grade*
(For Details, See Sht. 2B-3)

(5) *Protect Extg. Gas Valve Box And Cover And Adjust To Finished Grade*

(6) *Angle Point Of Vertical Grind*
(See Sht. 2B For Pvmt. Matching Details)

(7) *Sawcut Line Match Extg.*
(See Sht. 2B For Pvmt. Matching Details)

(8) *Protect Extg. Centerline Monument And Adjust To Finished Grade – 5*
(For Details, See Sht. 2B-5)

(9) *Protect Extg. MH*

(10) *8" Grind And 9" Level 3 ½" HMAC Overlay*

REGISTERED PROFESSIONAL ENGINEER
13,626
OREGON
JULY 16, 1987
WALTER G. BARTEL
EXPIRES 12-31-09

OREGON DEPARTMENT OF TRANSPORTATION

DAVID EVANS AND ASSOCIATES, INC.
2100 Southwest River Parkway
Portland Oregon 97201 Ph: 503.223.6663

HALL BLVD. OVERLAY
ALLEN BLVD. TO HART ROAD

WASHINGTON COUNTY

Reviewed By – RGA
Designed By – Scott Emmens
Drafted By – Justin DeMello

GENERAL CONSTRUCTION

SHEET NO. 5

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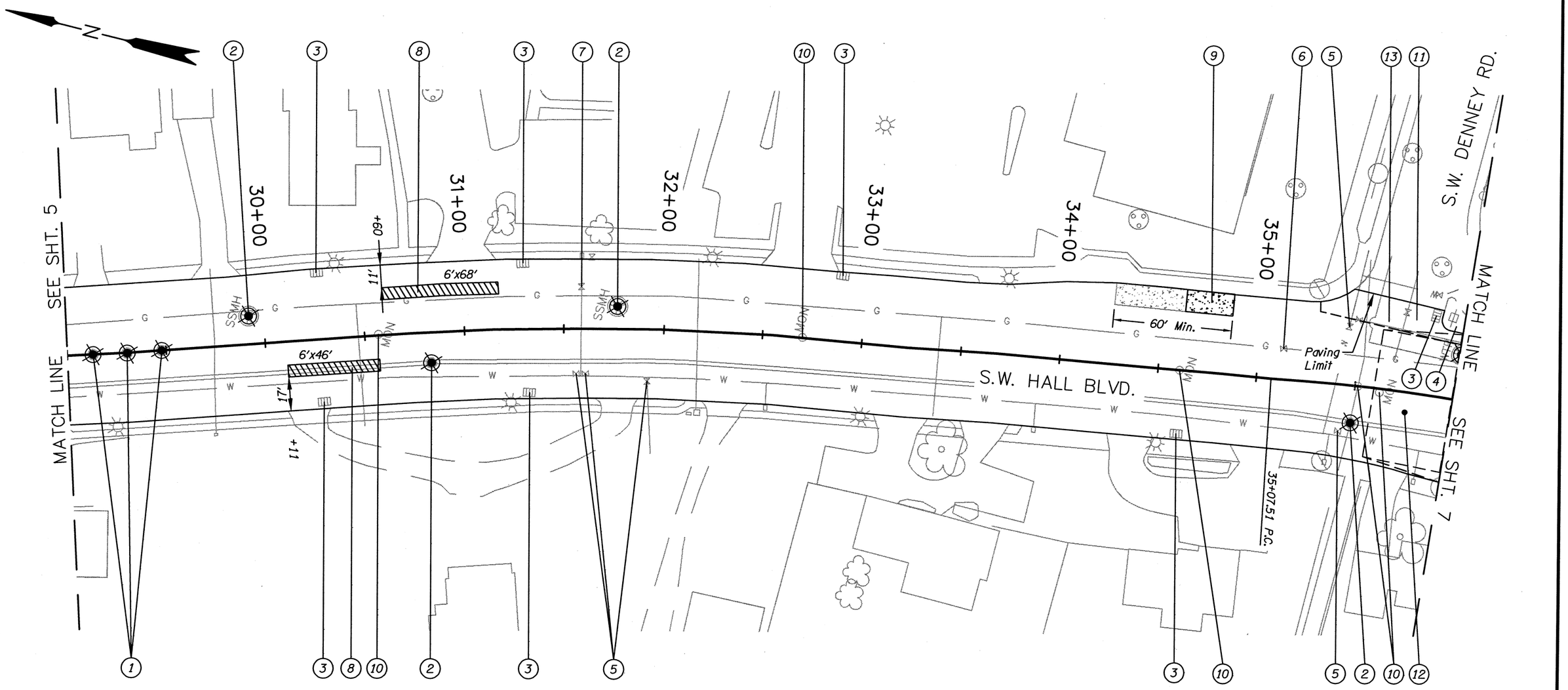

1. Minor Adjust MH - 3
2. Major Adjust MH - 4
   (For Details, See Sht. 2B-3)
3. Protect Extg. Inlet - 7
   (For Inlet Paving Detail, See Sht. 2B)
4. Protect Extg. Island
   (For Details, See Sht. 2B-2)
5. Protect Extg. Water Valve Box And Cover And Adjust To Finished Grade - 5
   (For Details, See Sht. 2B-3)
6. Protect Extg. Gas Valve Box And Cover And Adjust To Finished Grade
7. Remove And Replace Extg. Water Valve Box And Cover
   (For Details, See Sht. 2B-3)
8. 8" Grind And 9" Level 3 ½" HMAC Overlay
9. Install Tri-Met Bus Pad At End Of Extg. Pad. Const. For Total Length Of 60'
   (See Sht. 2B-4 For Details)
10. Protect Centerline Monument And Adjust To Finished Grade - 5
    (See Sht. 2B-5 For Detail)
11. Sawcut Line Match Extg.
    (See Sht. 2B For Pvmt. Matching Details)
12. Vertical Overlay Transition. Sta. 35+60 To 36+00
    (See Shts. 2 And 2B For Details)
13. Angle Point Of Vertical Grind
    (See Sht. 2B For Matching Details)

Scale 1"=50'

REGISTERED PROFESSIONAL ENGINEER
13,626
OREGON
JULY 16, 1987
WALTER G. BARTEL
EXPIRES 12-31-09

OREGON DEPARTMENT OF TRANSPORTATION

DAVID EVANS AND ASSOCIATES, INC.
2100 Southwest River Parkway
Portland Oregon 97201 Ph: 503.223.6663

HALL BLVD. OVERLAY
ALLEN BLVD. TO HART ROAD

WASHINGTON COUNTY

Reviewed By – RGA
Designed By – Scott Emmens
Drafted By – Justin DeMello

GENERAL CONSTRUCTION

SHEET NO. 6

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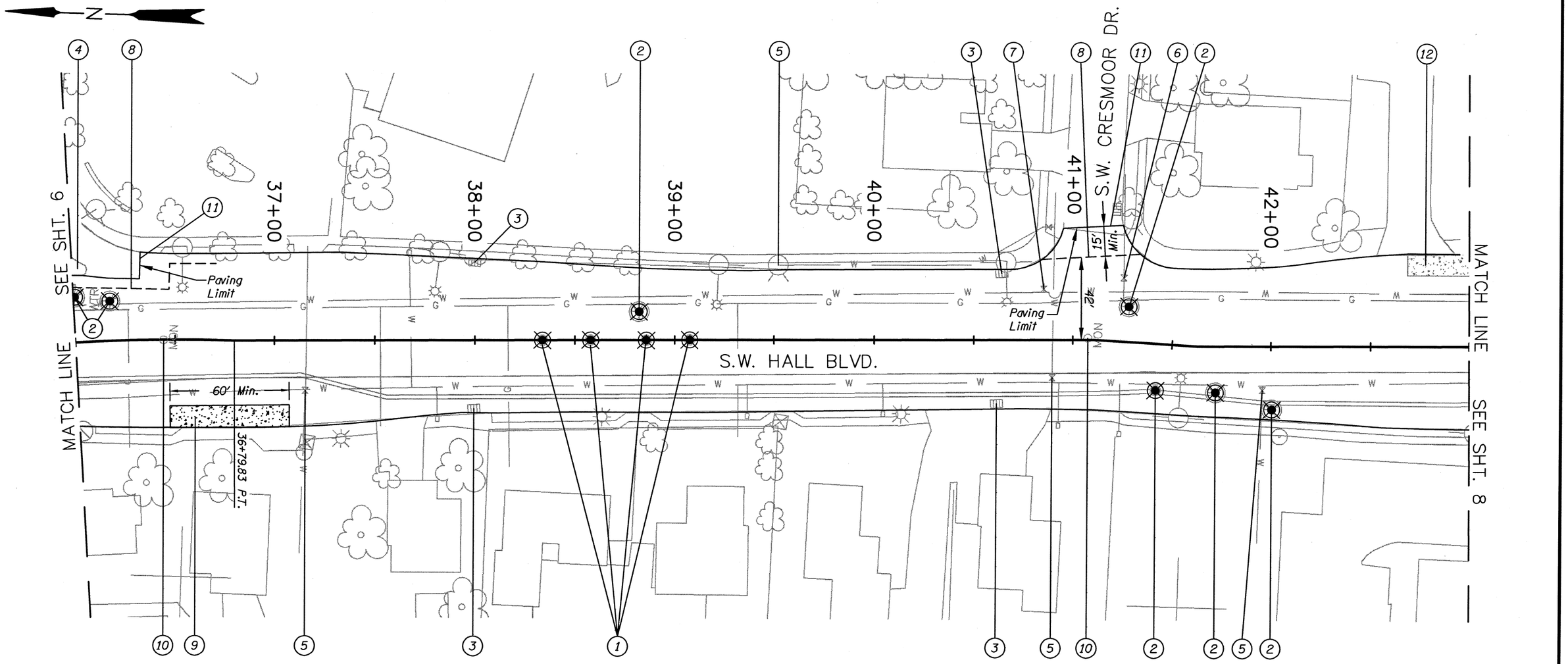

(1) *Minor Adjust MH - 4*

(2) *Major Adjust MH - 7*
(For Details, See Sht. 2B-3)

(3) *Protect Extg. Inlet - 4*
(For Inlet Paving Detail, See Sht. 2B)

(4) *Protect Extg. Island*
(For Details, See Sht. 2B-2)

(5) *Protect Extg. Water Valve Box And Cover And Adjust To Finished Grade*
(For Details, See Sht. 2B-3)

(6) *Protect Extg. Gas Valve Box And Cover And Adjust To Finished Grade*

(7) *Remove And Replace Extg. Water Valve Box And Cover*
(For Details, See Sht. 2B-3)

(8) *Angle Point Of Vertical Grind*
(See Sht. 2B For Pvmt. Matching Details)

(9) *Replace TriMet Bus Pad*
Construct for a Total Length of 60'
(See Sht. 2B-4 For Details)

(10) *Protect Centerline Monument And Adjust To Finished Grade - 2*
(See Sht. 2B-5 For Detail)

(11) *Sawcut Line Match Extg.*
(See Sht. 2B For Pvmt. Matching Details)

(12) *Remove Extg. Concrete Bus Pad.*
Replace With Level 3, ½" HMAC - 9" Depth
Over ¾" Leveling Aggregate - 1" Depth (Min.)

Scale 1"=50'

REGISTERED PROFESSIONAL ENGINEER
13,626
OREGON
JULY 16, 1987
WALTER G. BARTEL
EXPIRES 12-31-09

OREGON DEPARTMENT OF TRANSPORTATION

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2100 Southwest River Parkway
Portland Oregon 97201 Ph: 503.223.6663

HALL BLVD. OVERLAY
ALLEN BLVD. TO HART ROAD

WASHINGTON COUNTY

Reviewed By - RGA
Designed By - Scott Emmens
Drafted By - Justin DeMello

GENERAL CONSTRUCTION

SHEET NO. 7

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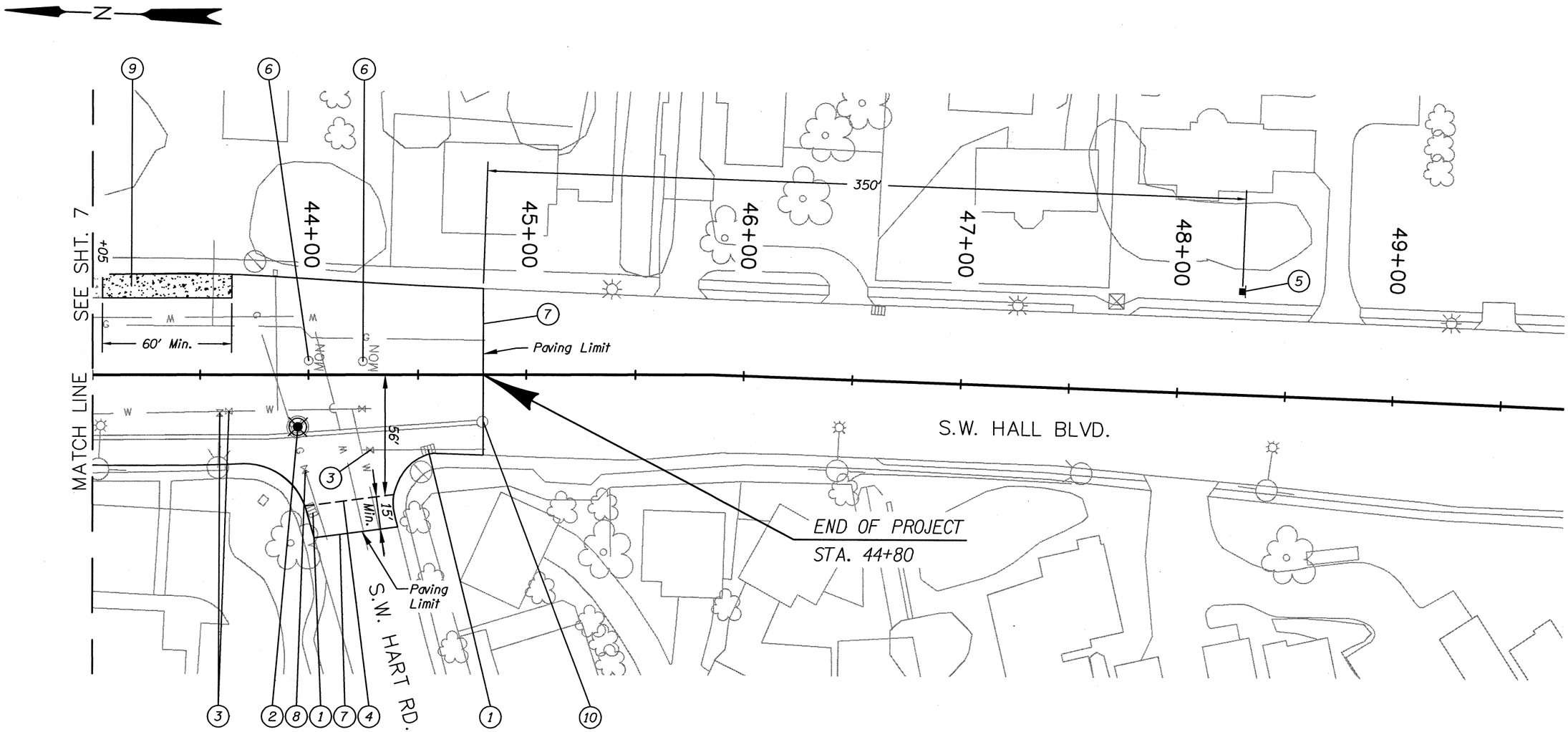

1. Protect Extg. Inlet - 2
   (For Inlet Paving Details, See Sht. 2B)
2. Major Adjust MH
   (For Details, See Sht. 2B-3)
3. Protect Extg. Water Valve Box And Cover And Adjust To Finished Grade - 2
   (For Details, See Sht. 2B-3)
4. Angle Point Of Vertical Grind
   (See Sht. 2B For Pvmt. Matching Details)
5. Install Temporary "Putting Oregon Back To Work" Sign For Duration Of Construction. See Sign #CG20-8su In The ODOT Sign Policy And Guidelines Manual For Details.
6. Protect Centerline Monument And Adjust To Finished Grade - 2
   (See Sheet 2B-5 For Detail)
7. Sawcut Line Match Extg.
   (See Sht. 2B For Pvmt. Matching Details)
8. Protect Extg. Gas Valve Box And Cover And Adjust To Finished Grade
9. Replace TriMet Bus Pad Const. for a Total Length of 60'
   (See Sht. 2B-4 For Details)
10. Protect Extg. Manhole

Scale 1"=50'

REGISTERED PROFESSIONAL ENGINEER
13,626
OREGON
JULY 16, 1987
WALTER G. BARTEL
EXPIRES 12-31-09

OREGON DEPARTMENT OF TRANSPORTATION

DAVID EVANS AND ASSOCIATES, INC.
2100 Southwest River Parkway
Portland Oregon 97201 Ph: 503.223.6663

HALL BLVD. OVERLAY
ALLEN BLVD. TO HART ROAD

WASHINGTON COUNTY

Reviewed By – RGB
Designed By – Scott Emmens
Drafted By – Justin DeMello

GENERAL CONSTRUCTION

SHEET NO. 8

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EXISTING

- EX AL — Retain and protect existing aluminum sign and mount
- EX C — Retain and protect existing model 170 controller and model 332 cabinet
- EX CC — Retain and protect existing control cables
- CH EX FD — Retain and protect existing (CH=channel) fire pre-emption detector unit
- CH EX FF — Retain and protect existing (CH=channel) fire pre-emption feeder cable
- EX HPS — Retain and protect existing high pressure sodium luminaire
- EX J1 — Retain and protect existing 17"X10"X12" precast concrete junction box
- EX J2 — Retain and protect existing 22"X12"X12" precast concrete junction box
- EX J3 — Retain and protect existing 30"X17"X12" precast concrete junction box
- EX LA — Retain and protect existing luminaire arm
- EX MA — Retain and protect existing traffic signal mast arm
- EX MP — Retain and protect existing traffic signal mast arm pole
- EX MPL — Retain and protect existing traffic signal mast arm pole with luminaire pole extension
- EX P/B — Retain and protect existing pedestrian signal, pushbutton and instruction sign
- EX PP — Retain and protect existing pedestrian signal pedestal
- EX SNS — Retain and protect existing street name sign
- EX TC — Retain and protect existing terminal cabinet
- EX VPh — Retain and protect existing phase (Ph) vehicle signal
- EX W — Retain and protect existing wiring
- EX DC — Retain and protect existing detector conduit
- S EX EC — Retain and protect existing electrical conduit (S=size) inch
- EX IC — Retain and protect existing interconnect conduit
- EX LC — Retain and protect existing luminaire conduit

INSTALL

- VDC Ph — Install video detection camera for (Ph=Phase)
- VDF Ph — Install video detection cable for (Ph=Phase)
- VDZ Ph — Video detection zone for (Ph=Phase)

REMOVE

- RX LF — Remove existing loop feeder cable

2 = 12"R, 12"Y, 12"G
3L = 12" RLTA, 12" YLTA, 12" GLTA
6L = 12" RLTA, 12" YLTA, 12" FYLTA, 12" GLTA
E = Elevator Plumbizer
A = Standard Plumbizer

REGISTERED PROFESSIONAL ENGINEER
12,197
OREGON
JULY 15, 1983
KEITH R. RUDISIL
EXPIRES 12/31/10

OREGON DEPARTMENT OF TRANSPORTATION
TRAFFIC ROADWAY SECTION

DAVID EVANS AND ASSOCIATES INC.
2100 S.W. River Parkway, Portland Oregon 97201 Ph: 503.223.6663

HALL BLVD. OVERLAY
ALLEN BLVD. TO HART ROAD

WASHINGTON COUNTY

DESIGNED BY: Keith Rudisil
REVIEWED BY: MPLA
DRAWN BY: Justin DeMello

ACCOMPANIED BY DWGS. SG-2, SG-3

SIGNAL LEGEND

Str. ID. No.____ T.R.S. DWG. NO. SG

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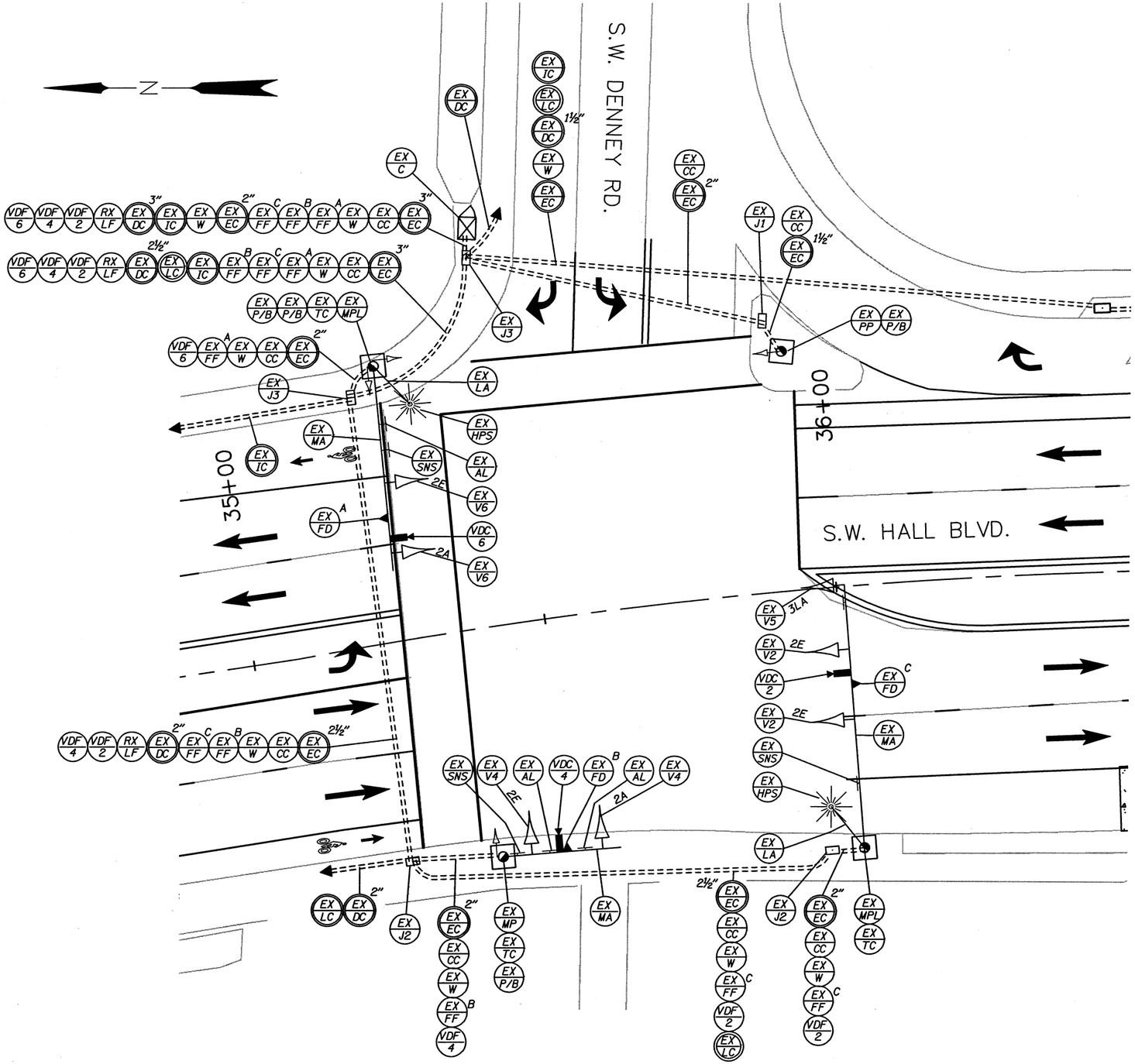
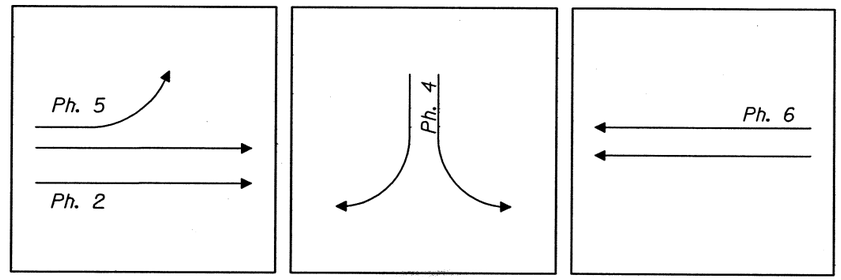
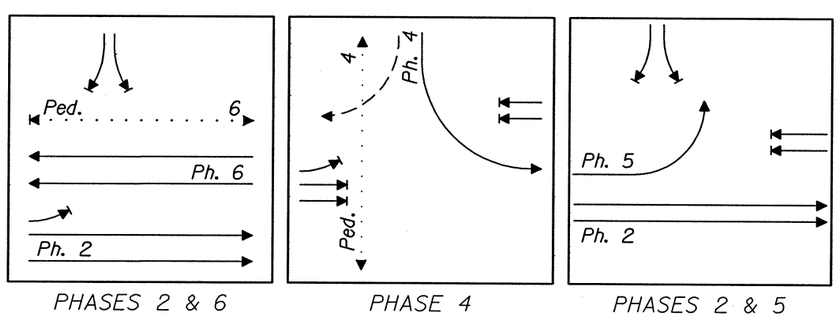
SIGNAL PLAN
S.W. HALL BLVD. AT S.W. DENNEY RD.





CHANNEL A CHANNEL B CHANNEL C

FIRE PRE-EMPTION OPERATION



PHASES 2 & 6 PHASE 4 PHASES 2 & 5

NORMAL PHASE ROTATION

Note: See Sht. SG For Legend

REGISTERED PROFESSIONAL ENGINEER
12,197
OREGON
JULY 15, 1983
KEITH R. RUDISIL
EXPIRES 12/31/10

OREGON DEPARTMENT OF TRANSPORTATION
TRAFFIC ROADWAY SECTION

DAVID EVANS AND ASSOCIATES INC.
2100 S.W. River Parkway, Portland Oregon 97201 Ph: 503.223.6663

HALL BLVD. OVERLAY
ALLEN BLVD. TO HART ROAD

WASHINGTON COUNTY

DESIGNED BY: Keith Rudisil
REVIEWED BY: MPLA
DRAWN BY: Justin DeMello

ACCOMPANIED BY DWGS. SG, SG-2, SG-3, SG-4

SIGNAL PLAN
DENNEY ROAD

Str. ID. No.____ T.R.S. DWG. NO. SG-2

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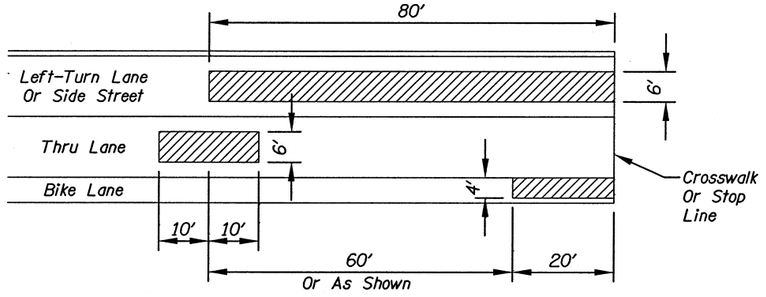
DETECTION PLAN
S.W. HALL BLVD. AT S.W. DENNEY RD.



TYPICAL DETECTION ZONE DETAIL

Notes:

See Sht. SG For Legend

Remove all loop feeders from conduits even if not shown and install a no. 16 AWG THWN stranded copper wire with orange base and blue tracer as a locate wire in empty conduits.

GENERAL NOTES:

All materials and workmanship shall conform to City of Beaverton ordinances, specifications and supplements to the 2008 Oregon Standard Specifications For Construction.

Contractor shall supply the following material as a minimum with the video detection system. Supply additional equipment as recommended by the manufacturer.

VIP3D.1	*1 ea.*
VIP3D.2	*2 ea.*
VIEWCOM/E	*1 ea.*
2 Channel I/O	*1 ea.*
Cameras	*3 ea.*

Mount cameras on mast arms using PELCO adjustable brackets (Tilt and pan extended sensor using brackets, band mount) with riser. All material shall be as recommended by the supplier and approved by the City of Beaverton.

VIDEO DETECTION ZONE WIRING DIAGRAM

*Bike Detection Zone

REGISTERED PROFESSIONAL ENGINEER
12,197
OREGON
JULY 15, 1985
KEITH R. RUDISIL
EXPIRES 12/31/10

OREGON DEPARTMENT OF TRANSPORTATION
TRAFFIC ROADWAY SECTION

DAVID EVANS AND ASSOCIATES INC.
2100 S.W. River Parkway, Portland Oregon 97201 Ph: 503.223.6663

HALL BLVD. OVERLAY
ALLEN BLVD. TO HART ROAD

WASHINGTON COUNTY

DESIGNED BY: Keith Rudisil
REVIEWED BY:
DRAWN BY: Justin DeMello

DETECTION PLAN
DENNEY ROAD

Str. ID. No.____ T.R.S. DWG. NO. SG-3

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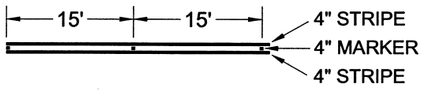
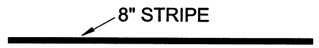


[1] MEDIAN NOSE

Two 4" yellow Methyl Methacrylate lines with 4" bi-directional yellow type I raised Pavement Markers at 15' on center

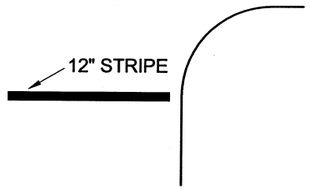


[5] BIKE LANE LINE

8" white Methyl Methacrylate line

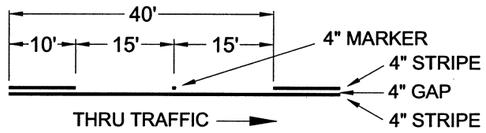
[9] BIKE LANE MARKINGS

White Inlaid hot Thermoplastic Arrow & Bike Symbol centered in Bike lane.



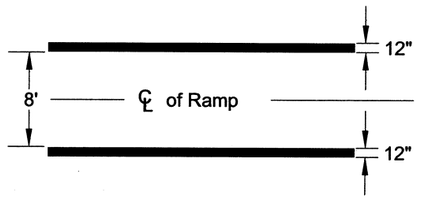
[12] STOP LINE

12" white Methyl Methacrylate line



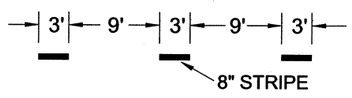
[2] TWO-WAY LEFT TURN CENTERLANE LINES

4" yellow Methyl Methacrylate lines with 4" bi-directional yellow type I Raised Pavement Markers



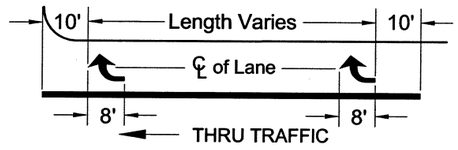
[6] CROSSWALK

Two 12" white Methyl Methacrylate lines



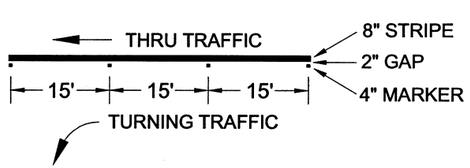
[10] SKIP BIKE LANE LINE

8" white Methyl Methacrylate lines



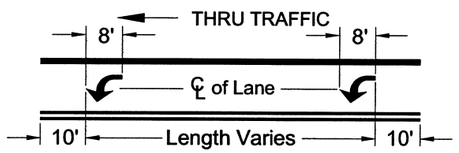
[13] RIGHT TURN LANE MARKINGS

White Methyl Methacrylate Arrows centered 10' from beginning of full width of turn lane.



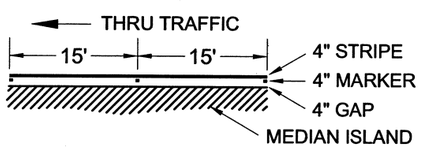
[3] LEFT TURN LANE LINE

8" white Methyl Methacrylate line with 4" mono-directional white type I raised Pavement Markers at 15' on center



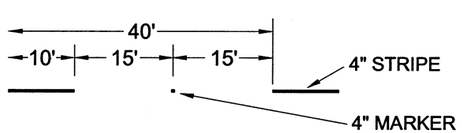
[7] LEFT TURN LANE MARKING

White Methyl Methacrylate Arrows centered 10' from beginning of full width of turn lane.



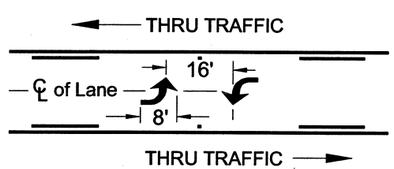
[11] MEDIAN LINE

4" yellow Methyl Methacrylate line with 4" mono-directional yellow type 1 raised Pavement Markers at 15' on center



[4] SKIP LANE LINE

4" white Methyl Methacrylate lines with 4" mono-directional white type I raised Pavement Markers



[8] 2-WAY LEFT TURN MARKINGS

Two opposing white Methyl Methacrylate Arrows centered in the turn lane.

REGISTERED PROFESSIONAL ENGINEER
12,197
OREGON
JULY 15, 1983
KEITH R. RUDISIL
EXPIRES 12/31/10

OREGON DEPARTMENT OF TRANSPORTATION

DAVID EVANS AND ASSOCIATES, INC.
2100 Southwest River Parkway
Portland Oregon 97201 Ph: 503.223.6663

HALL BLVD. OVERLAY
ALLEN BLVD. TO HART ROAD

WASHINGTON COUNTY

Reviewed By – Mike Laux
Designed By – Justin DeMello
Drafted By –

STRIPING DETAILS

SHEET NO. ST

P:\B\BVNX00000056\0400CAD\TT\Sheets\BVNX0056-ST.dwg jnd Jun 30, 2009 11:11am

N

S.W. ALLEN BLVD.

9+00

10+00

11+00

12+00

13+00

14+00

S.W. HALL BLVD.

80'

11' 11' 11' 11'

12' 12' 12' 12' 5'

MATCH LINE

SEE SHT. ST-3

BEGINNING OF PROJECT
STA. 9+22

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OREGON
JULY 15, 1983
KEITH R. RUDISIL

EXPIRES 12/31/10

HALL BLVD. OVERLAY
ALLEN BLVD. TO HART ROAD

WASHINGTON COUNTY

Reviewed By – KRR
Designed By – Mike Laux
Drafted By – Justin DeMello

STRIPING PLAN

SHEET NO. ST-2

P:\B\BVNX00000056\0400CAD\TT\Sheets\BVNX0056-ST-2.dwg jnd Jun 29, 2009 1:30pm

N

SEE SHT. ST-2

MATCH LINE

16+00

17+00

18+00

19+00

20+00

21+00

S.W. SABIN ST.

S.W. HALL BLVD.

MATCH LINE

SEE SHT. ST-4

12'

5'

2 4 5 10 8 5 10 5 9 11 12

P:\B\BVNX00000056\0400CAD\TT\Sheets\BVNX0056-ST-3.dwg jnd Jun 29, 2009 1:15pm

REGISTERED PROFESSIONAL ENGINEER
12,197
OREGON
JULY 15, 1983
KEITH R. RUDISIL
EXPIRES 12/31/10

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2100 Southwest River Parkway
Portland Oregon 97201 Ph: 503.223.6663

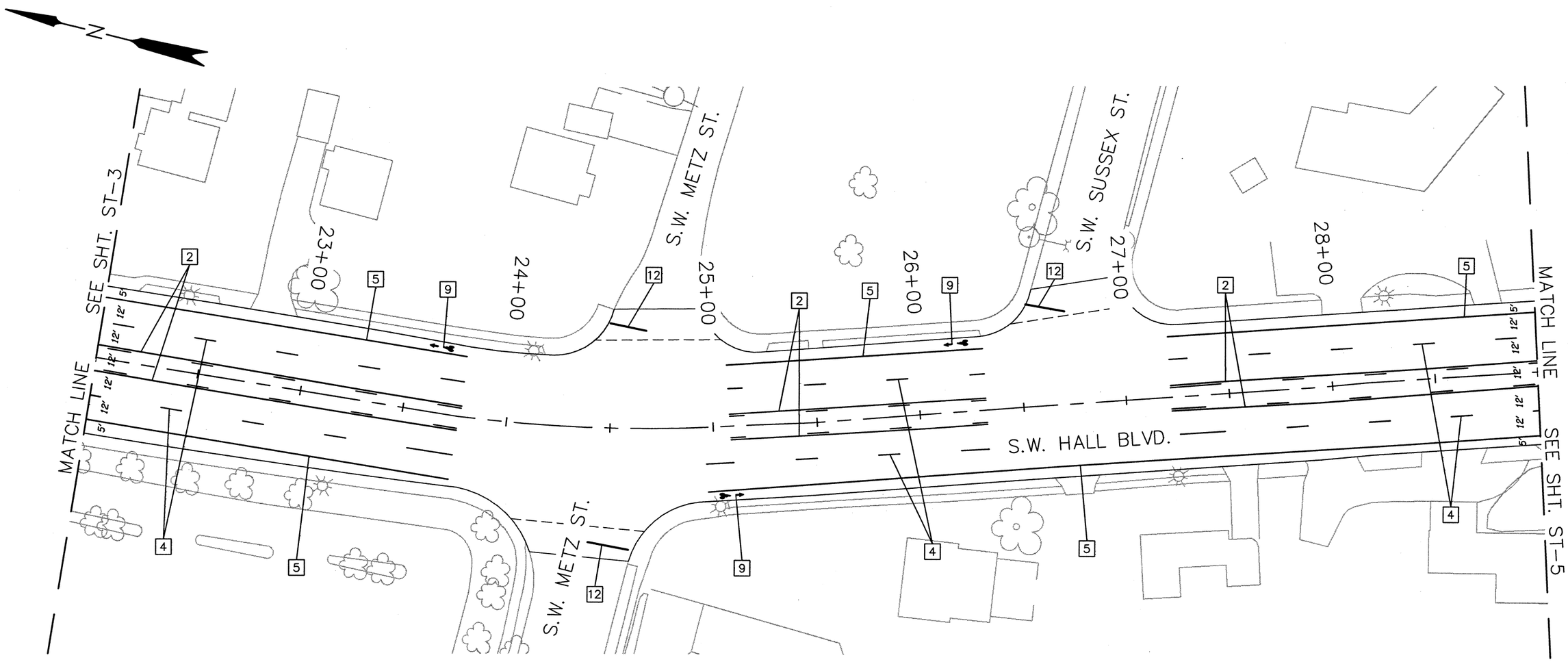
HALL BLVD. OVERLAY
ALLEN BLVD. TO HART ROAD

WASHINGTON COUNTY

Reviewed By – Kordell
Designed By – Mike Laux
Drafted By – Justin DeMello

STRIPING PLAN

SHEET NO. ST-3



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REGISTERED PROFESSIONAL ENGINEER
12,197
OREGON
JULY 15, 1983
KEITH R. RUDISIL
EXPIRES 12/31/10

HALL BLVD. OVERLAY
ALLEN BLVD. TO HART ROAD

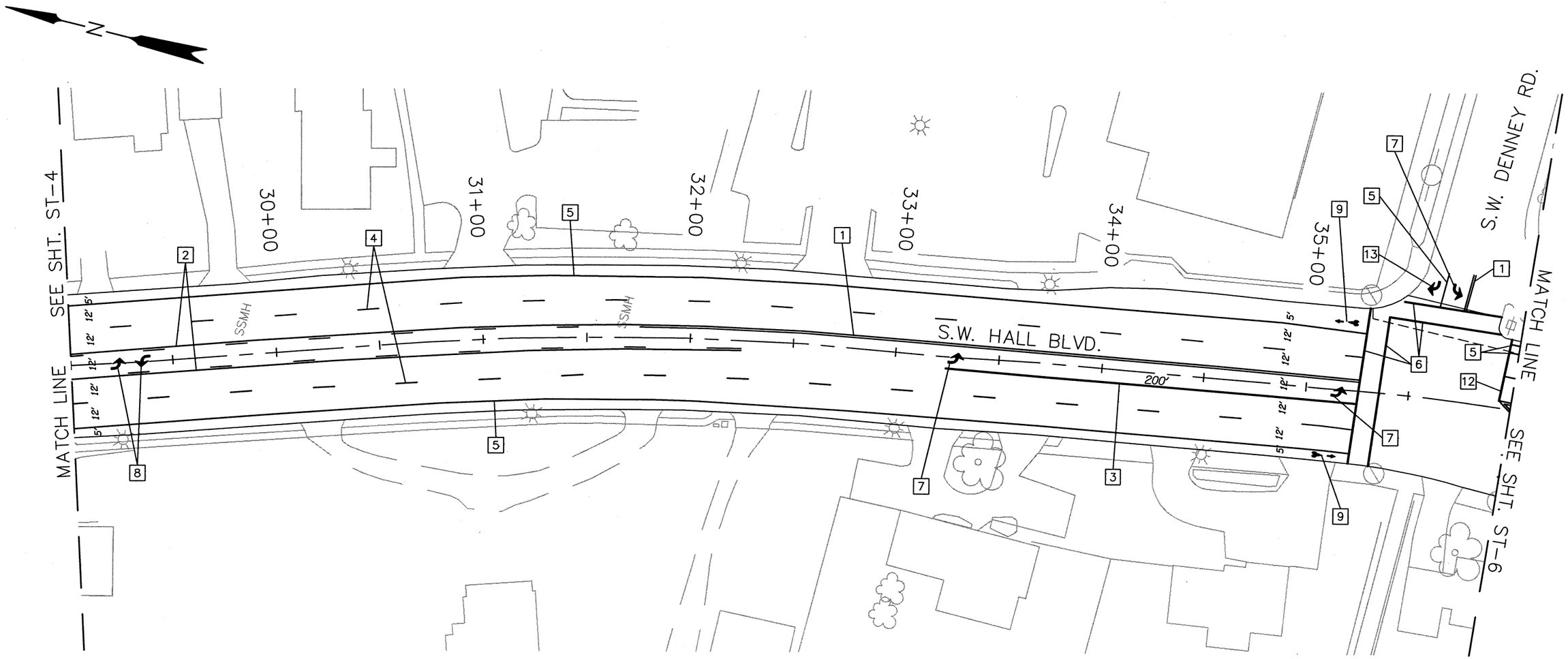
WASHINGTON COUNTY

Reviewed By –
Designed By – Mike Laux
Drafted By – Justin DeMello

STRIPING PLAN

SHEET NO. ST-4

P:\B\BVNX00000056\0400CAD\TT\Sheets\BVNX0056-ST-4.dwg jnd Jun 29, 2009 1:15pm



REGISTERED PROFESSIONAL ENGINEER
12,197
OREGON
JULY 15, 1983
KEITH R. RUDISIL
EXPIRES 12/31/10

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2100 Southwest River Parkway
Portland Oregon 97201 Ph: 503.223.6663

HALL BLVD. OVERLAY
ALLEN BLVD. TO HART ROAD

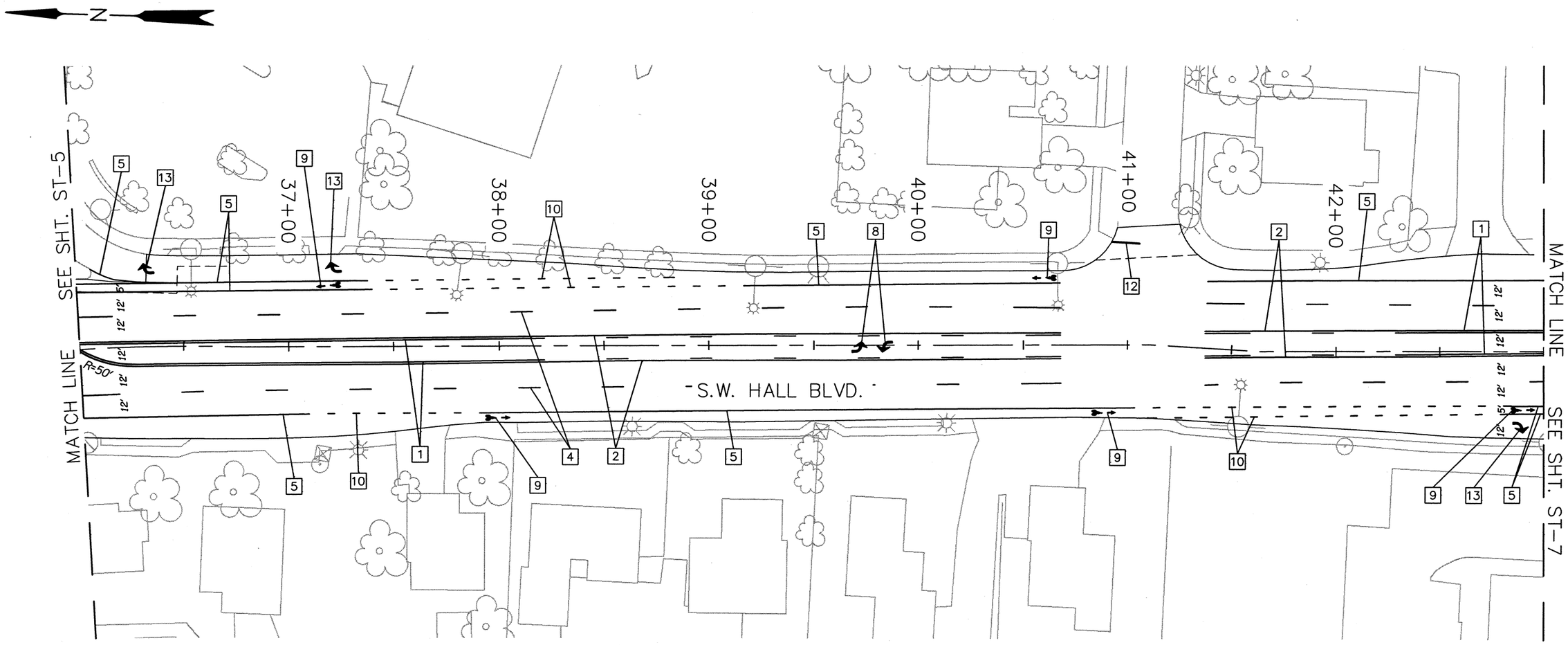
WASHINGTON COUNTY

Reviewed By –
Designed By – Mike Laux
Drafted By – Justin DeMello

STRIPING PLAN

SHEET NO. ST-5

P:\B\BVNX00000056\0400CAD\TT\Sheets\BVNX0056-ST-5.dwg jnd Jun 29, 2009 1:15pm



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Portland Oregon 97201 Ph: 503.223.6663

REGISTERED PROFESSIONAL ENGINEER
12,197
OREGON
JULY 15, 1983
KEITH R. RUDISIL
EXPIRES 12/31/10

HALL BLVD. OVERLAY
ALLEN BLVD. TO HART ROAD

WASHINGTON COUNTY

Reviewed By – Roberts
Designed By – Mike Laux
Drafted By – Justin DeMello

STRIPING PLAN

SHEET NO. ST-6

P:\B\BVNX00000056\0400CAD\TT\Sheets\BVNX0056-ST-6.dwg jnd Jun 29, 2009 1:15pm

N

SEE SHT. ST-6

MATCH LINE

44+00

45+00

46+00

47+00

48+00

49+00

S.W. HALL BLVD.

S.W. HART RD.

R=50'

12'

12'

12'

12'

5

21.5

5

5

4

1

6

12

13

END OF PROJECT
STA. 44+80

REGISTERED PROFESSIONAL ENGINEER
12,197
OREGON
JULY 15, 1983
KEITH R. RUDISIL

EXPIRES 12/31/10

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2100 Southwest River Parkway
Portland Oregon 97201 Ph: 503.223.6663

HALL BLVD. OVERLAY
ALLEN BLVD. TO HART ROAD

WASHINGTON COUNTY

Reviewed By – KLR
Designed By – Mike Laux
Drafted By – Justin DeMello

STRIPING PLAN

SHEET NO. ST-7

P:\B\BVNX00000056\0400CAD\TT\Sheets\BVNX0056-ST-7.dwg jnd Jun 29, 2009 1:30pm